

ADVANCE POSTS
OF
LIGHT CAVALRY.

RECOLLECTIONS.

BY F. DE BRACK,

GENERAL OF CAVALRY, COMMANDER OF THE ROYAL ORDER OF THE LEGION OF HONOR;

GRAND DIGNITARY OF THE IMPERIAL ORDER OF THE ROSE, COMMANDER OF THE IMPERIAL ORDER OF CRUSERO, COMMANDER OF THE ROYAL ORDER OF CHRIST, KNIGHT OF SAINT LOUIS, &c.

PUPIL OF THE MILITARY SCHOOL OF FONTAINBLEAU, OFFICER COMMANDING THE ADVANCE POSTS UNDER GENERALS LASALLE, MONT-BRUN, PAJOL, COIBERT, MAISON, AND OFFICER OF THE EX-IMPERIAL GUARD.

With Plates.

TRANSLATED FROM THE SECOND PARIS EDITION OF 1844,

BY MAJOR P. J. BEGBIE, *Madras Artillery*, (With Notes.)

TRANSLATOR OF THE FOLLOWING MILITARY WORKS, VIZ., DECKER ON THE ART OF BRINGING HORSE ARTILLERY INTO ACTION IN CONJUNCTION WITH CAVALRY, LESPINASSE ON THE ORGANISATION OF ARTILLERY, AND MIGOUT AND BERGERY'S ESSAY UPON GUN CARRIAGES AND THE WHEELED CARRIAGES OF ARTILLERY.

DEDICATED BY PERMISSION TO

HIS EXCELLENCY GENERAL SIR CHARLES NAPIER, G. C. B.

Commander-in-Chief in India.

MADRAS:

PRINTED BY REUBEN TWIGG, AT THE CHRISTIAN KNOWLEDGE SOCIETY'S PRESS, VEPERY.

1850.

To be had at Messrs. FRANCK AND Co., *Madras*; Messrs. LE PAGE
AND Co., *Calcutta*; Mr. H. A. CAMERON, *Bombay*; and Mr. E. JONES,
Bangalore.

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PREFACE.

THE Translator, in sending forth this work into the world, has many apologies to offer for the delay in its appearance.

It was first entrusted to a press, which subsequently proved not to possess sufficient means for passing it through with the needful rapidity; and, after months of wearisome delay, was transferred to the one whence it is now issued. The smaller type which was adopted in the first instance, it was of course needful to carry on with to the end, and Long Primer being a type not usually adopted for the printing of octavo works, few presses, unconnected with journalism, have such a supply as to enable them to strike off a work so printed with their usual rapidity.

The neatness of this more expensive type, however, and the compression of the work in consequence into a much smaller compass, will, the Translator trusts, in some measure, compensate for the delay.

MOUNT.
30th June, 1850. }

INTRODUCTION

THE work, of which the following pages are a translation, holds a very high rank on the continent amongst Military Treatises, and has been recognized as such by those of our countrymen, who have met with it in the original.

It is one of the most complete of its kind, and I consider that I have performed an acceptable service, even to the French scholar, in rendering it into English, so as to be accessible to all my countrymen.

There is no mistake so dangerous, and yet at the same time so general, as the conceiving that an officer of one arm has no concern with the tactics of another. It is impossible for an officer manœuvring a mixed body of troops, to develop the resources of each arm under his command, or even to know what services can be expected from each individually until he has studied and thoroughly comprehended what each is capable of performing. There is no necessity for his being conversant with the minor details of the distinct arms; but he should be able to understand the *object* of their manœuvres, and possess the power of handling them without embarrassment.

The work, now presented to the public, cannot be read without profit by any military man, and contains a mass of information not readily to be met with in any one publication. I am content to let it be judged by its own intrinsic merits. If it be worthy of patronage it will assuredly make its own way: if it be not, no lengthened exordium of mine will force it into notice.

P. J. BEGBIE, Major,
Artillery.

DEDICATION.

TO HIS EXCELLENCY

GENERAL SIR CHARLES NAPIER, G. C. B., &c.

Commander-in-Chief in India.

SIR,

I deem myself fortunate in having been permitted to usher the following pages into the world under the auspices of a name which stands so high in the military world, as that of Sir Charles Napier; and feel grateful for the very favorable terms in which your Excellency, in acceding to my request, has been pleased to notice my former translations.

The work of Colonel de Brack, now first presented in an English garb, is one eminently practical, and, as such will assuredly find favor with a soldier of your Excellency's stamp. It shows how a Frenchman begins by being a soldier, and ends by being an officer, in lieu of commencing as an officer, and finishing, as is too often the case, without becoming a soldier. Here is no red-tapism, no frivolous adherence to unimportant minutiae; but all is sound, practical, knowledge derived from the author's intimate acquaintance with his subject; and I trust that your Excellency will perceive that the translation has done justice to his merits.

I have the honor to be,
 . . . with profound respect,
 Your Excellency's most obedient
 . . . and obliged servant,
 P. J. BEGBIE, Major,
Madras Artillery.

ST. THOMAS' MOUNT, }
 June 30th, 1850.

INTRODUCTION.

TO THE OFFICERS AND NON-COMMISSIONED
OFFICERS OF THE 8TH LIGHT CAVALRY.

Dôle, 5th May 1831.

FELLOW SOLDIERS.

On returning to the service after fifteen years of absence, it has been a curious and interesting employment for me to compare the present state of things with my recollection of them. I recognise upon the whole important improvements, but I own that I have not found the cavalry prepared for war ; and I have remarked that the traditions, especially of detail, which are useful and indispensable, have been lost sight of to a dangerous extent.

In these fifteen years, much has been written ; but it has been mere book-making. The history of war has been unfolded ; but the writers have dealt in generals, and the plain instruction of the cavalry in the field has gained little by the perusal of their works.

I make an exception in favor of a few works which have appeared, and amongst others those of general *La Roche Aymon* who, a first rate light cavalry man, has made most useful additions to the instructions of *Friederic*. It is to be regretted that this general officer, whose works are but a summary of his judicious observations upon the proper ground for the manœuvres of cavalry, has not drawn up a complete elementary theory, which might serve as an authority and form a standard work, and which would thus fill the void, which every commandant of a corps seeks to overcome to the best of his ability, but the want of which exists up to the present time.

Whilst waiting for this work, which I ardently desire, urged on by the war which seems to be advancing with gigantic strides, taking as a basis the instruction which you have received in peace,

and then raking up my own recollections, which the Manual of *La Roche Aymon* is often of great use in enabling me to arrange methodically, I have hurriedly collected together, and under the form most simple and easy of retention by the memory (that, not of a theory, but rather conversational) the result of those principles which I have submitted to you at our classical re-unions.

The very small number of you, who have seen service, will form their opinion on what I lay down, according to their own recollections; the remainder will learn that of which they are ignorant, and will avail themselves of this information as a memo: which, as occasion serves, will remind them of that which they would otherwise probably forget, and will, I trust, smooth away some difficulties for them.

The excellent state of discipline, which has been maintained among you for the last fifteen years, has conferred upon you that benefit, which is its natural consequence—it has prepared the soil for the reception of the seed; and now is the time to sow. The strictness and the multiplicity of the duties, which it has imposed upon you, have induced you to act rather than reflect. In war, the most constant habits of reflection should go hand in hand with action. Pure machines, let them be as perfect as they may, become useless the moment that their action is disordered; let an unforeseen case arise, their movement is checked at once. In war, nearly every thing is unexpected; in light cavalry, where frequently every man acts independently, action and reflection should never part company.

The mischief of theories is to be found in their dryness. The *why* and the *wherefore* would appear to have nothing to do with them; and this *why* and *wherefore* is nevertheless the soul of our action. It is of this "*why*" that we are now treating in order that the example, which action presents to us, be not lost either for the present or the future.

In peace you have learnt how things *were* done; now you are about to see for yourself how they *are* done.

War is only learnt by war. The classical exercises, to which we have recently devoted ourselves, are only a theory more or less perfect, the application of which is wanting until such time as we may take the field.

War multiplies positions, and almost invariably in an instantaneous and unexpected manner, especially for the light horseman ; it presents the same facts under a thousand different aspects : we should therefore endeavor, in preference to bending our thoughts to such and such points, to accustom ourselves generally to take in every thing by the eye, to judge correctly, to be surprised by nothing, and to take the best measures with the utmost promptitude under every circumstance.

A man must be born a light-cavalry man. No situation requires such natural talents, and an innate genius for war as that of an officer of light troops. The qualities, which compose a superior man, *intelligence, spirit, and energy*, ought to centre in him. Constantly left to his own resources, exposed to frequent engagements, bearing reference not only to the body which he commands, but also to that which he protects and clears the way for, his moral and physical powers are in constant exercise. The profession, which he follows, is rough, but the opportunities for distinguishing himself are of daily occurrence : a glorious recompence which repays his toil so much the more amply as it causes his worth to be the earlier recognised.

I have often quoted to you General *Curély*; a sub-lieutenant with me in 1807, he was a general officer in 1813.

Yet, in 1806, when twenty leagues in advance of our army, and at the head of twenty hussars of the 7th, he struck terror into Leipsic, where there were 3,000 Prussians.

In 1809, fifteen leagues in advance of the division to which he belonged, and at the head of 100 light-cavalry and hussars, drawn from the 7th and 9th regiments, he traversed unperceived the Austro-Italian army, which it was his object to reconnoitre,

and penetrated to the very middle of the general staff of the arch-duke, commanding in chief.

In 1812, at the head of 100 light cavalry of the 20th regiment, at Polosk, he captured 24 pieces of ordnance, and took prisoner the general in chief of the Russian army.

" Ah, indeed ! this man, so valiant, so intrepid, so skilful, so indomitable of purpose, so collected, in his dangerous enterprises, whenever he commanded a detachment, was at once its surgeon, its veterinarian, shoemaker, cook, baker, farrier, up to the moment when, encountering the enemy, he shewed himself to be the most remarkable man of the grand army.

When he was present in an affair, the men, whom he commanded, were always more confident and more eager for action than others, and their deeds responded to their feelings.

Was a man of this description to be measured by the standard of the generality, and be kept below the level of praise which men of equal or superior rank, and moderate abilities, are so apt to heap upon distinguished men ? *Curély* served fifteen years, and all in time of war, before he was rewarded with an epaulette. Why had he to wait so long for it ? Because those, who had it in their power to ask for it for him, had not sufficient magnanimity to acknowledge his deserts. Thus he vegetated on, until a colonel, a man of a spirit corresponding to his own, estimated him aright, and threw down the barrier which repressed his energies. His after rapid advancement was then only an act of the strictest justice. For, if previously it had been so sluggish, the blame rested upon others.

If I dwell upon this fact, it is only as an example and a beacon. In no profession, so much as in the army, is it incumbent on a man to study most conscientiously those under his command, and derive every advantage from their peculiar qualifications. In fine, also, ought the justice, which he dispenses to them, to be more complete, and divested of all those petty foibles of self-love, unworthy of a generous disposition, and which become a grave, and

often irreparable, wrong, when they basely trammel genius, and deprive the cavalry of the services which the individual might have rendered it. Seniority is a claim, undoubtedly, and a very respectable claim, too; but it is not the highest. The armies, in which too much importance has been attached to it, have invariably been beaten; whilst those, in which merit has not been doggedly subjected to its withering requirements, have been as invariably victorious. Where the merits are equal, seniority should have the preference.

In 1815 *Curély* retired; his mind was not of that stamp which knows how to cringe; it was wounded and weary—it preyed upon his vital powers; and his spirit fled, a few years ago, to rejoin those of his noble compeers, who had died upon the field of battle, or perished upon the scaffold of the restoration. A wooden cross marks the spot where his body rests in the burial ground of the little hamlet, which, thirty years before, he had quitted as a simple volunteer. Why did not death wait awhile for him? He would have shaken off the dust from the flag, which his humble straw conceals. A field of battle on the day of victory—a standard captured from the enemy—these were the only grave—the only shroud—worthy of him.

To me *Curély* was the very model of a light cavalry man. During three years, I fought by his side, and his example and his advice are eternally engraven on my memory and on my heart. It is by studying his character that I have formed a standard for all the qualities requisite to compose a distinguished cavalry officer; and, if, at a subsequent period, when left to myself, I have conducted some little successful affairs, I have often owed that success to the study and presence of the recollections, which he has bequeathed to me.

In order to be a good officer of an advance guard, it is not sufficient to be brave, and to command properly under fire: it is requisite to bring the greatest possible number of men to bear upon that particular point, and to present them in that order which

will best ensure a decisive blow being struck. This second part of our indispensable instruction is not the most brilliant; but it is, perhaps, the most important: it is not to be acquired in garrison, and demands a host of conditions.

A habit of estimating the health of men and horses; a knowledge of prompt remedies applicable in certain cases; a daily and scrupulous inspection of the saddlery; a knowledge of repairs to be made in it from time to time; an inspection of the accoutrements and of the necessary repairs; a providing of every thing useful for man and beast, without overloading the animal; the mode of package properly understood; regularity of the pace in columns *en route*; an eligible selection of sites for bivouacs; a constant *surveillance* of every thing that may affect the health of the horses; a knowledge of the means of temporarily dispensing with the services of a farrier; theoretical knowledge of the use of the implements contained in his hold-all; a knowledge of the proper times for refreshment and sleep; a study of the *morale* of the men under one's command; a strict discipline, which restrains the troopers from arguing, when they have neither the guard room nor solitary confinement to apprehend; a *surveillance*, which prevents the powers of the horse being needlessly expended; a personal example to be given in every possible situation, affording it with the greater firmness when that situation becomes one of hardship and difficulty; the being able to inspire the troopers with an entire confidence, devotion, and energy; these are what the theories of peace cannot teach; these are what, in conjunction with courage, a military *coup d'œil*, and promptness of judgment in the field of battle, constitute a truly distinguished officer.

You have learnt many things in peace. The different drills, which you have been taught, will not be thrown away upon you, in consequence of their not having had their application fully followed out. You will retain, especially, from those severe studies, which have worn down your bodies and your spirits, the spirit of discipline, and individual skill in the management of your weapons and your horses, which are the fundamental points of all tactics.

For the rest, we shall cull that which is indispensable from that which is less useful, and we will direct all our attention, which has hitherto been too much distracted by a multitude of details, to those principal points, which ought to occupy it entirely.

"War," said General *Lassalle* to me one day, "is to the soldier, who has not previously quitted his garrison, what the world is to the young man, who is leaving the forms of his school. It is the application of the theory."

Peace has caused the light cavalry man to acquire bad habits, which he must shake off in the field. The readiness with which all articles of clothing, equipment, and armament, are sent to the different workshops for the slightest repairs, and indeed the obligation to do so; the cooking carried on in common through the squadron; the ridiculous custom of even allowing barbers to the squadron, &c., &c., all prevent a man's being independent of others.

The great quantity of useless things, which the soldier possesses; those regulation trowsers, which he wears dismounted in cold weather; those linen trowsers for the hot season; that luxury of goods, which is of no use, but to cause him to despise his leather breeches, and to necessitate the use of a huge portmanteau, which breaks the back of his horse, will all, doubtless, be abandoned, as soon as the first shot is fired.

At present, the equipment of a light cavalry soldier, or an hussar, appears to be designed solely for the purpose of giving him a complete outfit from garrison to garrison. I own that I cannot help raising my voice against the non-military idea, which has presided for some years past, over this creation of unnecessary wants.¹ The cavalry officer, who has seen service, only knows

^{1.} Would it not be a thousand times better, if men will cling to the notion that a soldier must have such a plentiful wardrobe, to have waggons attached to regiments, in which to carry all these changes of garments, and into which to throw all the kit that a horseman should only carry in time of peace? The hire of these waggons would not amount to much, and we should avoid the double inconvenience of galling or breaking down the horse, and distending the portmanteau beyond its proper and useful proportions.—A U T H O R .

too well that a huge portmanteau is speedily emptied in the field ; not by wearing out its contents ; but by the rapid loss of them. If the portmanteau were subsequently to remain empty, it would only be a petty evil ; for it would be a pure question of money, and the colonels of corps would have nothing to complain of, but a most unsightly pack ; but such is not the case, for the trooper always replaces the useless effects, which he has thrown away, by all the rags which he can collect, and which he would never have thought of picking up, if he had not had room to stow them away in. A light cavalry portmanteau, which will hold more than two shirts, and a hold-all, and, under its flap, a pair of boots, is not only useless, but even dangerous. The fewer necessaries a trooper has the more he will take care of them, the more they will be adapted to his wants, and the easier they will be disposed of. The chasseurs of the imperial guard made, under my own eyes, the whole Russian campaign with only an hussar jacket, and a single pair of Hungarian cloth trowsers.

One of the misfortunes attendant upon a state of peace, is, that neither the horse nor the arms of a trooper are his own. The dismounted men of the regiment, of whom there is always a considerable number, having to borrow the troop horses and accoutrements for their drill, ruin the mouths of the former, and soil the latter, thus destroying the interest and that powerful passion of possession, which a man always feels for those things which are touched by no hands but his own.

In the army of bygone days, I have often seen men refuse to take leave of absence, in order to prevent others riding their horses and using their arms during their absence.

From this feeling of property the most useful and noble consequences flow ; in time of war it is entire ; nothing wounds it, nothing assails it : the man is the sole master of whatever has been entrusted to his care from the moment that he quits the garrison : his horse and his arms form a portion of his existence ; death, or a crime, so grave as to merit disgrace, can alone deprive him of them. If I had had the happiness of commanding you in war, as I have

had the honor of doing in peace, I would have religiously maintained the sacred right of each one of you in this particular, and the very youngest recruit, who had been entrusted with the charge of his horse, should not have been dismounted for any individual—no, not for the most useful officer of the regiment; who might have lost his own.

It is in order to prepare you for a practical acquaintance with advance posts, that I have committed my recollections to paper, forming this species of manual, which I present unto you ; and that I have made these preliminary remarks, which are, in a measure, a preface to them. During the nine months, that I have had the honor of commanding you, or rather of being the father of our family, our common efforts have been crowned with success, since the regiment, which had suffered by the transfer of the old soldiers to other corps, now numbers nine hundred troopers fit for field service. These results have sprung from your zeal ; he, who is a good soldier in garrison, ought to be the honor of the army in time of war.

I cannot multiply copies of this manuscript, in order to present one to each of you : to save this trouble, I must therefore print it. As to its style, I abandon it to criticism. My object has been, not to make a book; but to be clear and explicit. I have conceived, moreover, that the promptitude of the compilation will add to the usefulness of the information contained in it, and I have hastened to throw my recollections on paper as they occurred to my memory. Thus, I repeat to you, these pages do not contain a theory, a digest of what I have heard, but rather a recital of what I have seen ; a conversation, which ought to be consulted rather than learnt off by heart, and which is by no means designed to be repeated by rote. According to my idea, repetition by rote is useless ; it is only indispensable in schools : moreover, it is the knowledge of men of moderate talents, who always find it more convenient to tax their memory than to exercise their judgment.

Several points will probably appear to you to be treated with too great minuteness, or to be too often repeated ; very likely this

may be the case ; but, if I am guilty of this fault, 'I shall console myself for it with the reflection that, when instruction is to be conveyed, it is better to be too diffuse than too concise. Moreover, suspend your judgment until you have seen the application ; you will then, perhaps, accuse me of having committed the contrary error.

Study is the armory, from which you will draw your weapons in the day of battle. Careful study assists thought and promptitude of action ; and thought and promptitude of action is the secret of the model officer. To no profession is that saying of a great man so applicable as to light cavalry—Promptitude is genius.

Theoretical instruction can only be imparted, encumbered by shackles, which the activity of warfare shakes off. The unimpassioned method, which essentially belongs to it, oppresses and fetters the brilliant dreams of the ardent imaginations of a youth who has not been hurried away in a career like ours—who has only witnessed an action from a distant point. Often also, this young man, who at an after period will confer honor upon our advance posts, placed at the commencement of his career under a *corporalism*, pervading all ranks, which never reasons on the *wherefore* of things, grows disgusted, because he meets with no response to his burning thoughts, and perceives merely a dry formula, where, under other circumstances, he would have acknowledged a fact. Let him ever learn patiently whatever is taught to him. Hereafter he will be able to make the application of it. The first shot that is fired, he will be relieved from thralldom—he will shake off the dust of the riding school and of the barrack room—his chest will dilate—his eyes will pierce beyond the horizon—battle theories, which he has learned, will regulate his movements, which will derive their readiness of execution from the instruction previously imparted. This future, which I have drawn, is perhaps at this moment close at hand to him. Let him recall to mind the leaden sole, attached to the buskin of the Roman recruit.

As regards instruction, one is not rich in it on the day of application, except when one is too rich. In that eventful day it

is too late to be learning : it is the time for selecting what is necessary, and dismissing what is useless from the memory. Further, war presents so many different chances, so many complicated positions, that the remainder of our instruction may find an unexpected application; and, if this application were to occur, were it only once in our lives, it would repay a year of travail.

When the men of my standing first took the field, they knew nothing, and our studies at the military academy having formed us into foot soldiers, we made our *début* as but sorry troopers. Our education was carried on under the clashing of sabres, which often decimated our ignorant and unskilful ranks. Our desire to do well, our enthusiasm, were not sufficient. At every step we were checked by this fatal ignorance. We wanted, what you possess—theory. With infinite trouble, we became better troopers than you are at present, but not equal to what you probably will be. We have had the advantage over you of witnessing those splendid fields of *Jena*, *Friedland*, *Wagram*, *Eylau*, and *Moscow*, which hardened our bodies and ripened our judgments. Soldiers of the great captain, actors in the sublimest of dramas, we have been enabled to deduce the practical causes of victory and reverses. Glorious days are drawing near also for you ; let us hope that you will only study in the book of victory.

Your friend,
F. DE BRACK,
Lt. Col. Commanding the Regiment.

ADVANCE POSTS

OF

LIGHT CAVALRY

RECOLLECTIONS.

CHAPTER I

OF THE OBJECT OF LIGHT CAVALRY.

Question. What is the object of light cavalry in the field?

Answer. To feel the way and to protect our army.

Q. How does it accomplish this object?

A. It precedes our column, feeling on their flanks, surrounding them, and covering them with a watchful and determined courage; following the enemy step by step; wearying and harassing him; counteracting his designs; wearing out his forces in detail; destroying his magazines, carrying off his convoys; and finally compelling him to exhaust in defensive measures the offensive strength, from which he would otherwise have derived great advantages.

CHAPTER II.

OF THE LEADER IN THE FIELD. — OF THE OFFICER.

Q. *What does the word “leader” signify?*

A. It signifies the head—the example.

Q. *What are the principal qualities of a commandant of light cavalry in the day of action?*

A. I. A correct judgment, a cool mathematical appreciation of the *materiel* of his own forces, and those of the enemy

II. That rapid and unfailing *coup d’œil*, which takes in at a glance, and is assured of, the moral feeling of the troops which he commands, and of those which he is about to attack.

III. That glance, which, no matter from what side he enters upon the field of action, comprehends it at once as a whole, and in its minutest details of distances, natural advantages, possibilities, and impossibilities, for attack, defence, and retreat.

IV. Promptitude and decision in action.

V. An enthusiasm, which carries all before it.

VI. That intrepidity which despairs of nothing, and which rallies detachments when in the most desperate condition.

VII. That *sang froid*, which never changes countenance, and enforces our subordinates to view matters with no eyes but our own ; add to these qualities, the bravery, which gives the example, and the justice which munificently recompenses, and you have the man of a thousand, who, in every circumstances, will have in hand a hundred squadrons, as if they were but one, will carry them along with him, halt them as though they were a single individual, carry off, or snatch the victory, and command her as a hand-maiden.

This combination of qualities eminently existed in *Napoleon* ; next to him, in *Frederic*, *Massena*, *Soult*, *Ney*, *Kleber*, *Desaix*, *Hoche*, *Landes*, *Morand*, and *Lassalle*.*

* An unworthy national jealousy has caused the author to exclude the name of *Wellington* from this list.—TRANSLATOR.

The external appearance and manner of a leader are narrowly scrutinized. This he should never forget ; he should never allow any thing to be read therein except that which he is willing should be perused.

Thus, when it is necessary that, in conducting an expedition, the secret of which is entrusted to him alone, his men should not be able to penetrate it prematurely, the imperturbability of the leader should prevent distrust from creeping into their ranks.

Q. Where is the post of the leader in an affair ?

A. Invariably at the point of command.

Q. But may there not be several points of command ?

A. No . there can be but one for the practical leader ; thus, for instance, when this leader on the field of battle commands several squadrons formed in echelon, which he purposed advancing in succession, he ought to restrain his impetuosity, and not put himself at the head of the leading squadron except under very peculiar circumstances. It is much more correct for him to hurl the leading squadron at the enemy, and put himself at the head of the second : by adopting this plan, he takes in the whole at a glance, and he holds all his troops in hand, whom he can quickly cause to participate in the success of the attack, should such be the result, and whom he usefully keeps together in case of a failure.

If some particular circumstance should induce him to believe his post to be at the head of the leading squadron, he ought not to proceed thither without previously giving to the commandants of the other squadrons orders so precise that they can never be in doubt, whatever phases the action may present ; and, as soon as ever he can, he ought to rejoin the squadrons which he has quitted.

In a retreat, on the other hand, the leader ought always to be with the rear guard, taking care to detail for the advance guard one of those officers, upon whom he has the greatest reliance, and so to regulate his march as to preserve his order and his paces.

There is one case in which the leader ought to head the attack ; it is, when the body, which he commands, is formed up either in line or in column ; then he proceeds in front, and is the first engaged : but, the position won, he throws up the character of *first soldier*, and resumes that of the *mancœvrer*.

Q. What ought the leader to do on the ground, under fire, and previous to the charge ?

A. He should study the *morale* of his men ; pass down from right to left at the distance of four paces in front of his line ; address a word here to an officer, and one there to a soldier ; enliven, stimulate them ; embrace the opportunity of calling the men by their names, and thus prove to them that he does not, and will not, lose sight of them.

On the field of battle, a man is shewn in his true colors : there is no longer any mask, any concealment—his passions are paramount—his soul is laid bare ; any one who can read, and is willing to read, the countenance, has the book before him ; there, deceit is struck dumb ; the heroes of the anti-chamber, the knowing ones of the drawing room, the Zieltens of petty warfare,* *the gallopers to and fro in time of peace*, no longer carry their heads so high ; there, woe betide the face which blanches under this or that chaco, the epaulettes, or the embroidery, which duck at the whistling of a round shot, with too great tenderness for his cockade; justice, complete justice, is rendered to all ; woe to him, who is condemned at this universal tribunal, where honor alone presides—he is fallen beyond redemption. Under fire, equality declared by courage, then the selection of the bravest amongst the brave by the voice of the brave themselves,—this will excite no blushes but those of enthusiasm and of pride !

It is necessary that the leader should infuse himself into his regiment in such a manner that his personal actions hurry on, or retard, the action of the whole : that his corps form but one body with himself, that its thoughts should be his own, and its confidence that which he imparts to it ; but this confidence should be most intimate, entire, instinctive, which whispers to the soldier in every position, *He is there, and that is enough.*

A leader, who does not hold his men in hand, and who does not move them as one man, is unworthy of his position.

The harvest, which the officer has sown, is to be reaped upon the battle field ; the more eminent that his previous services have been, the greater the reputation that he has acquired for justice, decision, courage, information, and care for his men, the more completely will he unite, as into a faggot, the various wills of the whole, to convert them into one single one, his own.

* An expression of *Lassalle's*.—AUTHOR.

There ought to be but one will in a corps, that of the head; this is indispensable, under the penalty of the destruction of all discipline, and the rapid demoralization of the corps.

The greatest misfortune that can befall a corps, next to the cowardice of its leader, is the ignorance and idleness of this same chief; for favoritism and intrigue always follow close at their heels.

The leader, who flatters himself that he conceals his weak points from the knowledge of his soldiers, is an ass. The soldier knows him a great deal better than he knows himself: let him then employ his time in endeavors to correct, and not to gloss over, his faults.

Egotism on the part of a leader is not merely a defect; it is a vice which tarnishes his most brilliant qualities, and deprives him of three fourths of his moral influence over his subordinates.

The leader, who does not feel that his regiment is himself, and who, in the day of privations or of rewards, insulates himself in selfish considerations, remains an isolated being—he is condemned to be so.

In an affair, when danger is at the highest, the leader ought coolly to distinguish the bravest; the affair being over, he ought to take no repose.

When bivouacking in front of the enemy, the leader ought to take but one half of the rest which his subordinates do. The military regulations, granting to him more horses than to any other officer, point out to him his obligations of watchfulness and personal fatigues.

The whole time that a campaign lasts, repose is interdicted to him; and he ought never to be more watchful than when he makes his men repose: it touches his honor.

After an affair, if the wounded are brought to the bivouac, he ought to have them placed in the vicinity of his temporary shelter, in order to watch over the attention paid to them; if they are destitute of straw, he ought to give up his own to them.

If any prisoners have been made, the leader ought to take them under his special protection, and lighten their condition by assurances and attention: if they are wounded, he will have their wounds dressed along with those of his own men.

If a detachment of another regiment, cavalry or infantry, be in the neighborhood of his own, the leader ought to proceed some paces in front of this detachment, and display lively marks of affection : the example will be quickly followed, and this detachment will become part of the family.

In the campaign of 1809, a battalion of the 7th light infantry was detached with the 7th hussars, to which I belonged. This infantry was received with open arms by the hussars. The friendship, which these two corps formed for each other was so strong, that, after it had been remarked that 7 and 7 would make 14, the hussars replied to the challenge, "*Who goes there?*", "The 14th hussars," and the infantry, "The 14th light infantry :" this fraternity quickly had an opportunity of displaying itself, for we were attacked at some leagues from Ratisbon by very superior forces, and we should have been overpowered, but for the mutual ardor and devotion with which it inspired us.

Some leaders, who have received orders to bivouac their men, go to work in a hum drum sort of way ; and, whilst they are thus uselessly frittering away the time, and exhausting the strength of their horses, other regiments dismount, take up their quarters, and forestall all the provisions and forage : this is a fault of a double dye on the part of the officer commanding the regiment thus robbed, and cannot fail to have a discouraging influence on the minds of the men.

The true war officer possesses a foresight which enables him to fix correctly beforehand every halt of his division, or of his brigade, and the room which his regiment or his detachment will occupy in bivouacking ; to take this up at once or leisurely : to post himself a hundred paces to either right or left ; near to, or distant from, a wood, a brook, and especially a village, is by no means a matter of indifference : in the long run, the physical powers of his regiment will depend upon this selection. Of two leaders of equal merit, one of whom is a good, and the other an indifferent, selector of bivouacs, the first at the end of a campaign will be able to shew a numerous and well mounted body, while the other will have only a few half starved horses.

Often, when columns are proceeding towards the enemy, two regiments will cross each other's path, and angry feelings are the consequence. It is almost always the fault of the commandant : if he has received orders to proceed to the front, he should pass

parallel to the column on his flank : if he must pass through it, he should despatch immediately a message to its commandant to that effect, or rather he should personally communicate the necessity of it to him : every thing will then be done without confusion, and those bitter feelings between one regiment and another, which have often such sad and enduring consequences, will be avoided.

The responsibility attaching to an officer commanding a light corps is a heavy burden to him who forms a proper estimate of his duties ; in many cases, the safety of the whole army is entrusted to him, and, under all circumstances, the lives of his men and the honor of his standard are in his hands. A colonel of light troops, on entering upon a campaign, ought first to assemble his officers, and afterwards his non-commissioned officers, and remind them of the duty devolving upon them, and of the confidence which he feels that they will perform it with that vigor, intelligence, activity, and conscientiousness, which are indispensable.

He ought to hold out to them in prospective the rewards which will be heaped upon them, and which he will use his best exertions to obtain for them.

He should then point out to them the gradually descending scale of responsibility through all ranks, and warn them that he will exact of each individual the strict performance of his duty.

Whosoever, no matter who, shall not, either through negligence or ignorance, be equal to the duties of his situation, thereby compromising the general safety and the honor of the regiment, he will at once deprive him of his command, and order him to the supernumerary rank, or to the rear.

Having passed his word to this effect, he must religiously observe it, evincing an untiring zeal to obtain the rewards for them, and a stubborn inflexibility in carrying out punishments.

In the presence of the enemy, the officer ought never to quit his proper place on the field, not even inclining ever so little to either right or left. This obligation is imposed upon him by the requirements of the service : it is strongly urged upon him by that instinct, that fatalism, peculiarly natural to the soldier. I have known officers severely wounded by round shot, which struck them when they were not in their proper place, and who, retired these ten years back, have still said to me with bitterness, "If I had been in my proper place, that would not have happened to me." If they were to live fifty years longer, this idea would con-

stantly haunt them. They will attribute to this fault all the misfortunes of their lives.

The dull routine of peace has taught the officer detestable habits ; it has persuaded him that, provided he does not run the risk of being placed in arrest for late turning out to the trumpet or bugle, that provided he can manoeuvre a section indifferently well, he is actually an officer ; and that he is at liberty to employ, to consume, to thoroughly dissipate, in the coffee house all the time which is not taken up in these *corporal's* duties. This conviction has been further strengthened in his mind by the exorbitant preference which is given to seniority.

By virtue of this law, which destroys all self love, all ambition to excel, the meanest talents are sure to hold a superior rank to those of the highest order, without making the slightest effort ; consequently, in regiments at the present day, the principal thing for an officer is not his intelligence and zeal, nor even the notice of the inspecting general ; but his position on the seniority roll. War will sweep away this error of peace with a rude hand.

One man is born a general ; another, a corporal : the destiny of both must be fulfilled ; it is a law of justice and of duty which the innate feelings of both will be the first to bring about.

Such and such an officer may be a second lieutenant, and a lieutenant of *chasseurs* ; then he ought to exchange into the *cuirassiers* : another one ought to quit the cavalry of reserve as soon as possible, for the command of a squadron of hussars. Such and such an officer ought never to be made a colonel ; another one, who is a non-commissioned officer to-day, ought to stride over every rank, and pause not till he find himself at the head of a regiment. But a reason must be assigned even for an act of justice, and this only war can give.

If an officer wishes to succeed, he should "prepare himself ; he should instruct himself ; he should employ every moment in mastering his profession in its minutest details ; he should know what are all the duties of a trooper ; in garrison his colonel should be convinced that he knows how to rub down a horse, and to clean arms and accoutrements ; a man cannot give orders on subjects of which he is ignorant."

Let him, who wishes to be an officer in reality, instead of wasting his time at a coffee house, consort with men from whom

he can derive information; let him visit the various infirmaries at the time of the daily visits of the surgeons and veterinarians; let him observe their treatment; let him converse with men, who have distinguished themselves, with the soldiers who have seen hard service, and are to be met with in the regiment or garrison to which he belongs; let him carefully watch the foremen of the workshops, as to how they make, or repair, the harness, clothing, and arms, and let him, without any false shame, put his own hand to the work; the knowledge that he will thus acquire will be of the greatest service to him in the field, will prevent his ever being at a loss, and will cause him to be selected for every detached command, which, separating him from his corps, and making him independent, will open up the path to him of honor and that promotion which is his due.

If he has the advantage of being in the same garrison with troops of other arms, he will hasten, at such times as his duties leave him at liberty, to the arsenals, to those works which excite military genius, to the polygon* of our artillery, to the brigade ground of the infantry; and there alone he will estimate the relations which the different arms bear to each other; he will form his opinion as to the difficulties and possibilities of the attack and the defence, whilst taking into his calculation the rapidity of the various formations, the distances of the range of fire, &c.

And, if on the frontier, or during an armistice, foreign troops should be in his front, let him visit their advance posts, their bivouacs, their barracks: let him attend their drill grounds, and let his military *coup d'œil* faithfully retain such improvements as he may recognise amongst them, and enrich his own service with them on his return.

Finally, let the officer remember that *skill is the right thing*, and that, in despite of every thing, right will triumph.

One of the most fortunate circumstances which ought to excite the emulation of an officer at the commencement of his career, is the being posted to a regiment fit at all points for service, and the finding himself commanded by expert and skilful leaders: let the young officer, thus happily situated, be in no hurry to rise above his first position. Every thing that he meets

* Places set apart by the French for the instruction of artillery, and enclosed with works resembling a fortification.—TRANSLATOR.

with is a study, and a study of the richest description for him ; let him take advantage of it, in order to ground himself thoroughly ; at a subsequent period, he will find that he has not been losing time, for, no matter to what height his fortune and his reputation shall hereafter raise him, every thing will appear easy to him : his first lessons will have a mighty influence over all his future career.

Under all circumstances never strike but at the head : he is responsible for every thing : to act otherwise would be to pass an affront upon command, and be an act of injustice. If a trooper sit badly, punish his captain ; if he be badly instructed, punish the captain instructor ; if he be ignorant of what his duties are on such and such a post, punish the officer commanding it. The head is the primary source of every thing ; it is the head that must be punished : he, who acts otherwise, conjures up for himself a host of useless shuffles, brings every thing to a stand still, ruins discipline, brings command into disfavor, and lowers his own credit, by proving that he knows not how the service should be carried on.

The natural turn of officers differs widely : one officer has that adapted for the field of battle ; another, one that enters into regimental details ; a third possesses an eye from which nothing connected with order and interior economy escapes. The really superior officer possesses an eye of two distinct powers ; but as the really superior officer is not often to be met with, the commandant should entrust special duties to those who are best fitted for them, without, however, for this, burying alive, as it were, useful and active men, so as to be injurious to their merited promotion, and provided also that the rest of the officers have no practical knowledge of the nature of the service entrusted to these specials.

Sometimes a body of officers, or non-commissioned officers, is sluggish, and devoid of energy, activity, life. This is almost always the fault of the commandant of the regiment ; but it is occasionally to be traced to two or three influential persons in the lower grades, who have established themselves as the leaders of the pack, whom their comrades have recognised in that capacity, and who give the tone and quality to the corps. Let the commandant discover the cause of this circumstance so destructive to efficiency, and eventually to discipline, and let him root it out forthwith. It is no more possible to command a regiments destitute of spirit

than for the most skilful pilot to have a vessel under control on the high seas, when the sails are flapping listlessly against the masts.

One of the misfortunes attaching to the position of a commandant is the restraint imposed by the dignity of that position on the thorough expansion of friendly intercourse with his inferiors ; that friendship, which would find it so delightful, when it has discovered merit and attachment, to raise the individuals to their proper level, to establish between them and himself a fraternal and complete equality, at those moments when the intervals of duty allowed the distinction of grades to be partially forgotten.

Sometimes, a kind heart, suffering from its isolation, resigns itself to this weakness so agreeable, and at the bottom so honorable, when it is founded upon esteem : the man is right, the commandant is wrong ; especially, if the inferiors, whom he honors with this affection, forget themselves, and often, without intending it, lose sight of their friend's position as their commandant. He, who familiarly associates with his inferiors, ought especially to have that firmness which will prevent his ever being led away by this intimacy into a lowering of tone which would elicit a failure of respect. He ought, so to speak, to proportion the degree, to which he lets himself down, to his moral superiority, and especially to the intellect and knowledge of the world of those inferiors, on whom he bestows a brotherly confidence. The commandant, who finds his superiority only in his rank, and whose mind is narrow and character weak, ought to abstain from similar familiarities, for his personal dignity and that of his position will be speedily compromised.

CHAPTER III.

CLOTHING.—EQUIPMENTS.

It is in war time that we at once perceive the inconvenience of those clothes, which in garrison we require to sit so close to the shape, of those boots, which we must needs have fit to such a nicety. When we arrive at the bivouac, the tightly confined limbs can obtain no rest ; the boots, dried before the fire, shrink upon the feet swollen with fatigue ; the thin soles give way and refuse to be of any use : one would give a good deal at this juncture to be able to exchange his clothing for a comfortable suit and an easy pair of boots ; but the time has gone by, and the individual must make his campaign in the most fatiguing manner, and see his finery converted into rags, for its straitness makes it rend in every direction, and in such a manner as to be beyond repair.

It is in circumstances of this nature that the usefulness of those much despised hold-alls is felt, and which are thrown aside in peace. He, who has neither thread, nor needles, nor wax, nor scissors, nor buttons, nor knife, nor awl, betakes himself to borrowing ; but lenders are rare, because those, who have these things, are provident, and because the foresight, which led them to provide themselves with them, teaches them to keep them for their own necessities.

Young officers ! attend to the advice which my experience furnishes ; never carry a large portmanteau ; it will only be troublesome to you.

 An officer, whatever his rank may be, requires no more necessaries than a private trooper.

Two jackets, two pair of cloth trowsers, three or four shirts, two pair of boots, are amply sufficient for a campaign of eighteen months ; provided that these necessaries are new, of a good quality, and fit properly. Let a hold-all, well furnished with thread, buttons, needles, &c., form part of the kit, and let this hold-all be put in requisition for the slightest repairs that may be necessary. With these precautions, you will save yourself a world of trouble ; of trifles, which may grow into misfortunes, and

which will have more influence than you can anticipate on your future military career.

Certain articles wear out more rapidly than others in a campaign ; of this number are boots : let those that you supply yourself with have thick soles, studded with small nails : let them be large, and at least $\frac{1}{4}$ of an inch longer than the foot. Straps soon break ; have some spare pairs, and fasten them to your trowsers, not with buttons sewn on, which speedily come off, but with brass studs : carry some of these buttons in your hold-all.

Pantaloons buckles break : have two or three of them in your hold-all. Spurs are liable to break ; have a third pair in your portmanteau.

The best trowsers for campaigning, and which alone I would allow officers to wear, are those called "*à la Lassalle*;" they are large, furnished with pockets, and the false leather boots attached to them, whilst preserving them from wearing too rapidly, can receive splashes of mud with impunity, because a touch of the sponge will in a moment free them from that source of dampness and filth.

One can also put over the riding trowsers, leather spatter-dashes, buttoning down the side. They possess the advantage of being removable on arrival at the ground, and can be cleaned by themselves ! but there is also a great inconvenience attaching to them, viz. : that they increase the number of articles of clothing, and require a certain time to put them on the legs. Every thing which simplifies the clothing of a light trooper, and accelerates the act of dressing, fulfilling one of the first conditions of our mobility, appears to me preferable.

The shako is an inconvenient head dress : it parries a sabre cut indifferently ; and, so far from fending off the rain from running down into the cravat, it is such a capital conductor of it, that not a drop is lost. Let the officers make their cap covers in such a fashion that the lower extremity, being neatly folded up, and fastening to the front, can be let to fall upon the neck, when the rain is heavy.

Very often officers, in order to have a lighter shako, desire the manufacturers to make them of cloth or pasteboard said to be water proof, or of very thin leather. They are wrong for three reasons. First, a shako of this kind offers no protection against a sword cut ; secondly, it soon gets out of shape ; thirdly, it swells immeasurably in wet weather, and shrinks up again so with the

sun, that it cannot be kept upon the head, which it hurts considerably.

Never carry into the field any thing but a stout leather shako, and take the precaution of securing it by a chin strap which will not readily give way.

At Ersling I saw the metal helmets of the cuirassiers cut completely through by sabre cuts, and how many troopers have I seen killed in consequence of their having lost their shakos.

Elegance in war is *usefulness*, and *preservation*. Let all leather articles, which are polished in time of peace, be greased in war time: you will find it advantageous in many respects: the first advantage will be that you dispense with the carriage of a number of brushes, embarrassing by their number, their weight, and their size: the second, that your leather articles will last longer; the third, that they will be rendered less permeable to wet.

When these articles are wet, be on your guard against drying them before the fire; especially too quickly.

One of the most troublesome pieces of equipment is the small sling of the sword. This arises from the weight which it supports, and which is actually doubled by the bad habit which obtains, of wearing it too long. It is necessary to look from time to time and see in what condition it is, and repair it the moment that there is any appearance of the stitching giving way; for, if it fail, away will go the sword to a certainty, and what is a trooper without a sword? It would doubtless be far better if this sling were attached to the belt by a double headed stud*; but, such not having been introduced, you must often look at the sewing in order to satisfy yourself that it is not yielding.

The leather sword knot is not convenient in actual war. Once before the enemy, it should be returned for good and all to the portmanteau, and its place supplied by a pocket handkerchief, rolled up and twisted school-boy fashion: a handkerchief thus prepared sits well to the wrist, and wards off the heaviest sabre cuts.

An officer ought to wear next his skin a light elastic girdle of leather, or of strong cloth, into which he can put a few pieces of gold—this is his purse. It would not be a bad plan either were the officer of light cavalry to sew a few of these pieces between the cloth and the lining of one of the oldest of his jackets.

*.We conceive that the button holes in the sling would wear out even sooner than the present stitching.—*Trans.*

In his trowsers' pockets he ought to carry a blank memorandum book and a good pencil; a small pocket compass; a pewter spoon; and a knife containing, in addition to its ordinary blade, penknife, a horse pricker, a punch, a lancet, and a steel. In order to prevent this knife from being lost, it would be useful to have a hole drilled through the lower part of the handle, for a string to pass through, the other end of which should be fastened to the trowser's pocket.

His pocket handkerchief he will carry in his shako.

The small portmanteau, that he will have upon the horse. Which he rides, will contain the requisites for the toilette, a shirt, a pair of stockings a handkerchief, a hold-all, similar to that of the chasseur, a small quantity of linen for binding up wounds, a small writing portfolio containing a few sheets of paper, ink, pencils, pens, wafers, and a stick of Indian ink and a camel's hair brush.

Under the rider, and on his saddle fastened by a centre strap, there will be a double pocket wallet made of strong ticking, or canvas: the off pocket will contain the rider's provisions; the near one, a feed of oats.

The pockets of the officer's shabraque will contain, the one a nosebag folded up, and the other his tobacco pipe.

The tobacco pouch will be slung to the rider's sword.

If the officer possesses a telescope, it will be slung across his shoulders.

As to his brandy, if he have a small goatskin to hold it, which is the best kind of flask, as it is not liable to be broken, he will stow it in his wallet.

Upon his led horse, the officer ought to put, not a portmanteau, which always takes a long time in fixing, and then not fitting properly, which crushes the saddle below it, slips, and is lost in a night march, and which can be easily stolen, as the ropes which fasten it can be cut in a moment; which galls the horse, requires to be unpacked every time that there is a necessity for opening it; and which adds to these inconveniences that of being almost always made of a soft, spongy, leather, and of never protecting its contents from the rain—but a pair of stout saddle bags covered with water proof leather. These saddle bags ought to be of moderate dimensions, and themselves fixed strongly to a piece of very

stout leather, which forms a covering to the saddle on which it is placed, and is fastened to rings to prevent its slipping. They will be secured by a stout girth, which buckles under the horse's belly, so as not to jolt and thus impart a double motion to their contents.

The off bag will contain linen and clothes.

The near one will hold provisions. Care must be taken that the bags are of equal weight

The opening of the bags will be on the outside, so as to enable the contents being got at without unpacking.

Upon the led horse, between the saddle bags, will be placed a kettle, a large tin saucepan, and a sickle with its handle.

The officer will take care that his provision bag contains salt, pepper, garlic, onions, or shalots, and vinegar, for seasoning is especially required in campaigning. I would also recommend him to take some sugar: it is of great comfort on certain occasions. Neither will he forget to carry tinder, some matches and wax candles, as the light which they will afford him will be of the greatest service, when he takes up his quarters for the night.

Officers occasionally put their toilette articles in their cartouche box; this is a bad practice; for, when they require cartridges, they have to borrow them from the troopers. An officer's pouch, equally with trooper's, is intended to carry cartridges, and nothing else.

Cloaks are issued to the troopers to protect them, as well as their arms and ammunition. In peace, during a march, you may halt in order to open them out, because a man, arriving in proper time at his quarters, has time and means to dry himself; but you must not do this in time of war: as soon as the rain commences, open your cloaks out, when the rain has ceased, leave them sometimes on the men's backs to dry; then accustom your men to fold them up compactly and in a proper manner without halting. At the first halt, the men are to complete this packing, and the commandants of squadrons and sections will inspect them.

The luxurious quantity of necessaries served out to the soldier has compelled the use of a portmanteau considerably too large. A campaign shall have scarcely commenced before the greater part of this useless kit will be thrown away or lost; but it is to be feared that the horse gains nothing by this temporary reduction of weight; the trooper will replace his linen pantaloons,

by rags, which he will heap upon his poor horse without any prospect of their being hereafter useful to himself. It is therefore absolutely necessary that the officers should hold frequent and unexpected inspections of the portmanteaus. They should direct every article contrary to regulations to be destroyed and thrown away, and severely punish those troopers, who, in contempt of orders, shall a second time commit the fault of wasting the strength of their horses in carrying useless articles, which are almost always stolen.

At present the weight carried by a light cavalry horse is from 251½ lbs. to 258 lbs. and this weight is naturally greatly increased in rainy weather. Add to this, that of the provisions, and you will easily imagine that it is necessary to be very strict about the loads.

Sometimes the officers make a trooper carry their own personal supplies on his own horse. The commandant ought to positively prohibit this practice, and severely punish the officer who shall act in this manner, after having been checked for it. The trooper's horse belongs to the state. His services should never be employed except for the state.

CHAPTER IV.

OF SADDLING.—OF THE PACKING OF THE KIT.

Q. How does it happen that often a non-commissioned officer, or private, is deprived of promotion, or a medal, which he might have obtained?

A. Because, instead of continuing in the field with the squadrons to which they belong, they have remained in the rear in some petty dépôt.

Q. Why?

A. Because the horse has been galled, and rendered unfit for service.

Q. What has galled him?

A. The saddle.

Q. Why has the saddle galled him?

A. Because the officer of the squadron in issuing it, and the trooper on receiving it, have not paid sufficient attention to its properly fitting the back of the horse.

The first thing to be done, on receiving a saddle, is to place the bare saddle tree on the back of the horse, to look whether the side bars properly adjust themselves; whether they are parallel to the seat of the place where they are put, always allowing for the modifications, which these surfaces will undergo in consequence of the motion of the horse, so that the weight of the saddle may be distributed throughout as equally as possible, and not upon any part of those side bars; the slightly convex shape of these side bars is only given to them with reference to the perpendicular position in every possible relative situation of the horse and his rider. He should see that the arch in front does not pinch the withers, either on the sides or on the summit. That the arch to the rear is sufficiently raised, and the cantel sufficiently high to prevent the portmanteau pressing upon the loins, when it happens to be packed. That the side bars be smooth, so that tumors may not be raised by their roughness.

He should look whether the pins, made of green wood, and afterwards drying, are not loose in their holes, and may thus inflict wounds on the horse.

Whether the ridge or curve of the saddle tree is not raised enough, so that the man, being thereby brought close upon the dorsal vertebrae of the horse, in lieu of being clear of them, will be the cause of pressure and dangerous friction.

Whether this curve does not rise too much to the front or rear, which, by throwing the rider too far backward or forward, will derange his perpendicular, impart a see-saw motion to the saddle, establish a constant pressure in a particular spot, fatigue the rider and his horse when in motion, and undoubtedly take the skin off both.

Whether the holsters do not pinch the shoulders too much, which would interfere with their free action, and necessarily hurt them.

The only manner, in which to form a correct judgment of the sit of a saddle, is, in the first place, as I said before, to put the bare saddle tree on the back of the horse, then to make the man mount on this saddle tree, and carefully to note where the pressure takes place.

If, in every movement of the horse, the side bars are not perfectly parallel to his sides, the pressure will be irregular: for, either the tree will be too large, and the side bars, sustaining the whole of the interior pressure, will hurt the horse near the back bone, or it will be too small, and the side bars, resting only diagonally, will quickly produce excoriation on those portions of the ribs which they compress with all the weight of the rider and the load.

This having been done, the leathern portions of the saddle will be added, it will then be put above the saddle cloth, carefully spread; next add the crupper, the girths, the breast strap, in such a manner that all of them, acting together, will retain the saddle in its original position, and, so far from causing, will actually prevent, galls of every kind.

When a saddle fits a horse properly, it requires neither crupper nor breast strap to keep it in its proper place: this shews that these two portions of harness must not be drawn too tight, which would only impede the free action of the horse and occasions useless chafings.

The girths, on the contrary, ought to be tightly drawn, much more because in keeping the saddle cloth in its position, they prevent its wrinkling and galling the horse, than because they retain the saddle in its proper place.

The captain commandant of a squadron, in fitting a saddle to the back of one of the horses of his squadron, ought to be able to judge beforehand, not only how it will tell upon that back fattened up by the idle life of the garrison, but especially upon it when the condition of the horse is lowered by campaigns and long marches. He ought therefore to be guided, not by the fleshy outline, but by the contour of the bony framework of the animal.

After the saddle has been tried in the manner which I have laid down, the packing will proceed, and the trooper mount, and, in such alterations as may be suggested, ample scope must be given for those fallings off in condition of which I have already spoken.

This important part of our labors having been brought to a conclusion, we proceed to bridle the horse.

The first care is the selection of the bit. The shape of the mouth points out that which is most adapted to it ; nevertheless, it occasionally happens that, after having been guided by the general rules in these cases, the greater or less sensibility, either general or partial, of this particular mouth, has set our calculations at defiance. In this case, do not hesitate to change the bit, until you have hit upon the one most suitable for it.

After having put on this bit, we must guard against a practice, which I have unfortunately witnessed in several regiments, and, amongst others, in this ; viz. that of shortening the links of the curb chain, in order that the trappings may look more uniform and neat ; this is sacrificing the useful to the elegant, whilst it is to the useful, on the contrary, that we ought to sacrifice every thing else. Let us leave the curb chain at its full length, because, in certain cases, we shall be able to afford greater play to the horse's mouth. Should this horse die, and be replaced by another, the same curb chain will answer, whatever may be the thickness of the animal's under-lip. If the horse does not obey the curb, when it is twisted flat, we can put it on untwisted, in a round form, and produce greater effect on him. This method, useful in peculiar circumstances, will necessarily shorten the curb,

and, finally if the chain break, and we lose the broken ring, we have links enough left to replace it.

Let us therefore guard against tightening too much the curb, the nose band, and the throat band; it is uselessly torturing a horse, impeding his respiration, and depriving him of all liberty, all play of the bit, which is essential to the moisture of the bars of the mouth: lastly, the bit is badly placed, when its cheek bits oscillate to the front, the effect of the pressure of the bit upon the bars of the mouth fatiguing him, and destroying the sensibility of the bars; it imparts a severity to the bit, which the horse is so far from obeying that it often determines him to be obstinate, deprives him of control, and speedily makes him restive.

When the horse has been saddled some days, and the damp and use have caused the leather to yield and stretch, we must adjust the different parts of the accoutrements afresh, to prevent their acquiring awkward wrinkles, to cause them to fit the horse properly, and guard against useless chafing and fluctuations: we must renew this operation as often as we observe the necessity of doing so.

Q. What is it that often causes a girth to break, and the rider to be thrown in consequence?

A. Properly speaking, a girth seldom breaks, being made of very strong leather, and when it becomes old and dry enough to break, it is replaced. But the girth is attached to the saddle tree by a thong, which is considerably weaker and lighter than those parts of the saddle, which it unites, and its power not being in proportion to that of those parts, the knot easily undoes, when it is not properly knotted, or breaks, being quickly dried, or perishing, from a very short period of use: it is to this thong that we must continually direct our attention, as our safety depends upon its strength.

Q. The backs of troop horses are generally badly made: some are quite straight, others completely round; some are lower in front than behind, and others have the contrary defect: others, again, are saddle backed?

A. The greater reason then to pay more attention to the consideration of them, so that they may be properly saddled.

Q. But what if, during a campaign, a horse falls off considerably more in condition than we had previously calculated it would do?

A. I have already told you that it is necessary, before you start, that you should study the skeleton frame, and not the fleshy exterior, and that you must conform to what it points out : however, if you have committed the fault of not foreseeing what has occurred, you must not hesitate to attach panels to the side bars of the tree.

Q. *What are these panels made of ?*

A. Of a piece of stout cloth, nailed upon the side bars, and stuffed with horse hair. If this is not procurable, then of hay or straw.

You must be careful in one particular ; viz. to drive the nails, which fasten these panels, into the upper part of the side bars, and consequently away from all contact with the back, so that their ends may not hurt it by their roughness.

Q. *If the horse is lower in front, or in rear ?*

A. You will make your panels thicker in front or in rear, to correct this faulty conformation ; which is so much the more dangerous in that, as it gives the saddle an inclination to slip forwards or backwards, it causes a greater strain upon the crupper or breastband, quickly producing galls, which you cannot cure, because you cannot entirely remove their cause ; and in that, as it throws disproportionately the weight of the rider forwards or backwards, it cramps the paces of the horse, paralyses his action, and greatly diminishes the effective power of the rider.

In general, the French troop horses are low in front, and deficient of wither ; the mode of spreading the saddle cloth only partially corrects this vicious conformation : it is therefore necessary that every regiment should have a certain number of saddles made expressly with the saddle bow higher than the cantel.

As a general rule, a man and his horse should form one animal : care must be taken that the centre of gravity of this union should be *one*, and correctly calculated : to effect this the weight must be centrically placed over its supports.

Q. *What should be done, when, in the field, the sides of the horse are chafed ?*

A. After folding up the saddle cloth, you must place a piece of linen over the part which chafes, to prevent the woolly fibres from irritating it : then raise the saddle by half panels, which will

bear upon the sound parts without touching the injured ones; thus, the horse, even while marching, will be cured of the injury.

If, after the wound has been healed, and the half-panels have been removed, the horse gets chafed again, notwithstanding every precaution, the saddle tree must be instantly changed.

Q. If the horse should be wrung in the withers?

A. The saddle bow must be raised with half panels, a piece of linen be placed in like manner under the saddle cloth, and the weight in front be temporarily thrown to the rear.

Q. If he be chafed on the loins?

A. The saddle cloth must be folded shorter, so that its rear portion may not touch the wound; the weight and thickness of the portmanteau must be diminished, by taking out the necessaries and putting them on the seat: and the portmanteau must be raised so as to prevent its coming into contact with the wounded part. If these precautions are insufficient, the portmanteau must be dispensed with. Sometimes, the side bars, being too long, hurt the horse to the front or to the rear: in this case, the cause must be removed, by shortening the side bars on the side where they chafe, or at least, by paring down the salient angles.

Sometimes, also, wounds on the loins are to be attributed to the careless manner in which the jacket is folded up, the buttons of the jacket touching the horse: this fault is easily observed and corrected.

Q. But what can a trooper do, when he is deprived of his portmanteau?

A. He will place between the seat of his saddle, and his shabraque, his two shirts unfolded; his hold-all in his holster pipe, his best pair of boots on his feet, and the rest of his necessaries will be sent to the regimental dépôt.

** Q. If the horse is hurt in the shoulder by the chafing of the carbine?*

A. The trooper must support his carbine in the bucket, until the sore be perfectly healed.

Q. If the horse is chafed by the crupper?

A. The crupper must be slackened, and rolled round with linen: if these precautions are not sufficient, it must be removed altogether.

Q. If the horse is galled by the saddle girths?

A. This sore is always occasioned, either by the saddle being put on too far forward, or else by the girth having become too hard and dry. We must remove the cause, in the first case, by saddling further back, and placing it so that it will retain its proper position without straining too much on the crupper, and by lightly scraping the edge of the girth, where it hurts the horse, greasing it, and covering it with linen, or any soft body, such as sheep skin.

Q. If the horse's mouth is wounded?

A. We must remove the cause by lowering or raising the bit, loosening its upper checks, letting down the snaffles, &c.

Very often the men, in bridling their horses, do not take the precaution of putting the snaffle above the mouthpiece of the curb bit, in consequence of which the two bits, being foul of each other, press together upon the bars and cause wounds.

The great art in packing consists in three things; I. Only to carry what is absolutely necessary; II. To distribute the weight as equally as possible, so that the horse may suffer the least quantum of fatigue, and not be galled; III. To afford the rider the greatest possible facilities for managing his horse, and to derive the greatest advantage from the whole of his powers.

The art of package forms three-fourths of a trooper on service. Be not therefore surprised at the importance which I have attached to it, ever since I have commanded you, at the continual obligation which I have impressed on you of daily showing on parade every thing properly packed and in good order for each section of the regiment.

There are certain things which one can never know sufficiently until they are known too well.

Every time in war that you have spare saddles, either in consequence of the death of a horse, or the capture of some belonging to the enemy, do not send them to the rear, or abandon them on the field of battle, until you have tried them on the backs of your horses that have been galled or chafed by causes which you have observed to have arisen from the shape of your saddle trees. I would recommend the Hungarian saddle tree to you: they are the best that you can possess, as they never wear out, and will fit nearly every horse.

Never, moreover, abandon any articles of equipment, until after you have taken out whatever will be of use to you, not with the view of making a reserve depot of them, which would only be to load your horse with a useless weight, but in order to replace on the spot whatever may be deficient, or to change that which has become good for nothing ; but, with reference to this, the commandants of squadrons, should preside over this business, and permit only useful exchanges. . . .

Let the commandants of squadrons, during war time, often make unexpected inspections of the saddlery and equipments.

A campaign once commenced, do not send any horses to the regimental depot, except on the greatest emergency.

A gall, or chafing, which during peace, would induce us to lay a horse up, cannot receive this indulgence in war time. In campaigning, a galled horse, if he is capable of working, must work. It is the business of his rider to cure him on the march. I have seen horses which have gained the cross of the Legion of Honor for their riders, and those horses were skeletons, reduced in strength, and with all the skin off their backs ; amongst these, I might cite the one on which my brave friend, *Guindet* was mounted, when he killed the Prince of Prussia at Saalfeld.

Unfortunately, in war time, a light trooper very often has not the time to rub down his horse, on which operation his health very much depends ; but he will always find time to slacken his girths, to draw the saddle cloth forward, and to adjust his saddle : let him not neglect to employ it thus.

The trooper ought to live only for his horse, who is his legs, his safety, his honor, his reward.

CHAPTER V.

ON SHOEING.

A trooper cannot be too careful of his horse's feet: a nail badly driven, a small stone lodging in the frog, a hard substance sticking in the hoof, a shoe, which becomes loose, and is lost, may, all of a sudden, shut one out from field service—Who thinks of these things?

I admit that a detachment is often without artificer or farrier. As soon as a trooper perceives that his horse goes at all lame, he ought to quit the ranks, dismount, and examine the foot on which the horse limps.

If this lameness is caused by a stone sticking between the shoe and the hoof, he must get rid of it by hammering the shoe on the side on which it fits tightest with another stone, because it will more readily fall out on the side where the shoe is loosest.

If it be a nail, it must be extracted by means of a cleft stick, which will seize the nail between its head and the hoof, and, being forced backwards, acts as a lever, and forms a substitute for the pincers. The foot should then be cleaved, and, if the man has any grease, or a candle end, the hole should be stuffed with it, and matters left in this state, until he meets the artificer or farrier, to whom he will bring the horse.

If the trooper hear one of his horse's shoes clattering, he ought to quit the ranks, and inspect the foot. If the looseness of the shoe be occasioned by the drawing of the nails, he should hammer their heads with the back of an axe, or a stone, and, as soon as the points re-appear through the hoof, rivet them as well as he can, as a temporary expedient, until he meets with a farrier.

If it be occasioned by the loss of several nails, one should be driven in by gentle blows, guiding it in the hole made by the former nail, so as to avoid the risk of pricking the horse; and being careful to drive it so that the front may come out rather lower than higher in the toe: this nail should be driven into that part of the shoe where there are fewest nails. If the trooper be

a young man, who is afraid to attempt this, let him request an old soldier to be kind enough to do it for him ; and then afterwards take his horse to the first farrier that he may meet.

If the shoe hardly hold at all, and, if it require several nails to keep it on, the trooper will wrench it off, and put it in his pocket. He will then walk, leading his horse by the bridle.

It must be understood that all this applies only when the enemy is a long way off ; for, under fire, precautions must no longer be taken ; and, whether a horse be unshod or otherwise, lame or not, the horse must proceed, and the trooper must on no account dismount without orders.

The more hilly and stony the country is, the more attentively must the trooper listen to the sound of his horse's feet, and observe the various alterations indicated by his tread.

The serre-files ought to have their eye always fixed upon the road, by which their detachment has passed ; and, if they perceive a shoe lying on it, they should pick it up, and return it to the trooper, whose horse has lost it.

A shoe is seldom lost except through the carelessness of the trooper. If, previous to starting, this trooper had examined his horse's feet ; and, if when the halt was sounded, he had inspected them again, summoning the farrier when he observed a nail to be missing, this shoe would not have been lost.

Good farriers are not easily met with. The commandant of a squadron should therefore carefully superintend the operations of the smithy, and without hesitation remand to the ranks as a private the farrier who shoes carelessly, and repeatedly pricks the horses.

Farriers are creatures of habit, and pay too little attention to the mode in which the horse stands. Sometimes they shoe so as to throw the horse's weight on the toe, sometimes on the heel : in the first case, leading to cutting and a thousand other accidents ; and, in the second, fatiguing, and rapidly exhausting the powers of the horse, from the unnatural strain thrown thereby on the extensor muscles of the leg.

A captain commandant, at the commencement of a campaign ought to satisfy himself twenty times over rather than once, that every one of his men possesses not only a spare set of shoes, but, at the very least, double the number of nails that those shoes require.

If the season be advanced, he ought to take care that every man, in addition to his usual stock, is provided with a certain quantity of frost nails.

He ought also to satisfy himself with his own eyes that the spare shoes have been fitted to each horse's feet.

As soon as he finds his stock of nails and shoes getting low, he should endeavor in every possible way to repair his losses, either by setting his farriers to work at every opportunity or by taking the spare shoes of those horses which have been sent to the regimental depot in the rear, or by taking off the shoes of those horses, which have been killed in action. I have always remarked that in a campaign the squadron, which brought most horses into the field, was that which had the best farriers, and who were the most carefully superintended.

It is always the fault of the commandant of a squadron when his horses are in want of shoes.

CHAPTER VI.

OF ARMS IN WAR TIME.

In peace you will have learnt how to *manage* your weapons : in war you will learn how to *use* them.

In France the arms of a light cavalry soldier are the carbine, the pistol, the sabre, and the lance.

The French fire arms are the best in Europe.

All their power lies in the skilful management of them. The care which is taken of them redoubles their effect.

This care extends to the method of using them, and of keeping them in order : their effect must therefore be studied, as well as the causes which tend to wear them out.

The range of the carbine may be taken at three quarters of that of the musquet ; the pistol is for close warfare.

The range of a fire arm depends upon two causes ; the strength of the charge, and the nature of the bore.

In war, as there is but one calibre, so is there but one description of cartridge. It is served out indifferently for the use of the musquets of the squadrons, and the pistols of the cavalry.

The quantity of powder contained in a cartridge is calculated for the longest ranges.

To load a carbine as heavily as a musquet would be wrong, inasmuch as the former is less strong and lighter than the latter, and is not designed to carry so far.

To load a pistol as heavily as a carbine would be a mistake for the same reasons.

Q. How then should the charge be calculated ?

A. Upon the strength, the lightness, and the range of the piece ; upon the strength, in order not to wear out the piece too rapidly ; upon its lightness, so as not to render its shots uncertain by too heavy a recoil ; upon its range, so as to accomplish the object.

The carbine, fired at its full range, ought to use only three-quarters of the cartridge; at the ordinary distance, only two-thirds; the pistol ought never to be loaded with more than half a cartridge.*

Q. Which is the best method of taking aim with the carbine?

A. To bring it well to the shoulder; to cover the centre of the man aimed at with the lower portion of the bore; to raise the muzzle of the piece deliberately in the proper direction; and, when the line of sight appears to cover the centre, to touch the trigger with the second point of the finger, slowly and without jerking, keeping the object, aimed at, always covered, and then fire.

Q. Why do you press lightly on the trigger?

A. Because I run less chance of deranging the aim when I fire.

Q. Why do you take aim from the bottom upwards, instead of from the top downwards?

A. Because, if the piece goes off before the line of sight is quite in its proper direction, I shall hit either the man or the horse in their lower extremities, whereas, if the same accident were to occur in levelling from above downwards, I should touch nothing.

Q. Why do you aim at the centre of the body in lieu of at the breast?

A. Because at short distances the ball has a tendency to rise;† and moreover, by firing at the centre of the object, I have greater chance of success.

Q. What is point blank distance?

A. Ninety paces.

Q. If the enemy is at a greater distance, how do you act?

A. I aim higher; thus, at 110 paces, at the breast; at 130, at the shoulders; at 170, at the head; at 195 at the feather of the shako.

Q. In taking aim, ought not the trigger guard to be inclined to the left?

* By having but one cartridge for all arms, it is evident that there will be a great waste of powder. The English plan of making up distinct cartridges for the different arms is evidently the best; not only as avoiding waste, but as ensuring uniformity of charge, instead of leaving it to the judgment of the soldier.—TRANSLATOR.

† This is a common error, into which the author has fallen.—TRANSLATOR.

A. This is a theoretical error, which is continued to the present time, because it was adopted, when arms were brought to less perfection than they are now, and because, from the slowness of throwing open the pan, it was apprehended that the priming would fall out, and be lost before it was ignited. In order to fire with effect, it is necessary to use the sight in taking aim, which you cannot properly do, if you incline the bore to one side : always, therefore, hold your weapon straight. . . .

Q. Do you act upon the same principles with reference to the pistol ?

A. Yes ; except that I keep the right arm bent, the butt at a foot from the eye, the elbow inclined to the left and covering the line of fire : I hold the butt loosely, in order not to derange the aim by the straining of the muscles, and I fire only at very short distances. In firing a pistol, equally with a carbine, the vertical line is to be looked to rather than the horizontal one.

Q. Which are the surest pistol shots ?

A. Those which are fired quite close. There is no necessity to take such nice aim with shots of this description ; but the muzzle should not be in contact with the enemy's body, as the pistol might burst, and injure the individual using it.

Q. When you have fired, and missed the enemy, can you judge the direction your ball took, and by this knowledge amend your next shot ?

A. Yes ; by the involuntary movement which the enemy in question makes, turning his head from the side on which the ball passed, whether it has gone to the right or left, or over him : if you have fired too low, you will guess it by the dust raised, or the starting of the horse.

Q. What care ought you to take of your fire-arms ?

A. On arriving at the bivouac, if you have it in your power, take the barrels out of the stock, wash and dry them properly ; then put the arms together again directly, after having thoroughly wiped the pan ; then pass a greased rag over all the iron parts.

Always have a supply of flints ;* if your own are exhausted, take those of deceased men, or of those, who have been taken

* Percussion locks having been generally introduced, a considerable portion of these instructions has become obsolete ; but I have deemed it best not to mutilate the work.—TRANSLATOR.

prisoners, or of arms which have been cast away, and, carefully fit them. If this resource of borrowing or of capture fail you, break a flint stone as well as you can with the back of your hatchet, and fashion it into a flint good or indifferent. If you have not a piece of sheet lead to put in the jaws of the cock, beat out a ball on a stone with the back of your hatchet, and convert it into a proper substitute for that which you have not.

Every time that you fire, pass your nail over the edge of the flint; if this does not succeed, strike it very lightly with the thick end of the ramrod, but bear in mind that this method rapidly wears the flint, and should only be used in moderation. Do not hammer your flint until you have taken the precaution of ascertaining that there are no grains of powder below it, which might be ignited by the sparks. If your flint has worn short, place it nearer the hammer, so that, in firing, the blow may knock it up, and elicit the sparks, when it strikes the hammer.

Before firing, wipe the hammer clean, and inspect your priming. In order to its being properly placed, it should fill the pan, but no more; if it exceeds the contents of the pan, the hammer crushes the powder, and cakes it, which delays the ignition.

If the priming do not fill the pan, it permits part of the charge to escape from the bore into it, thereby making a dangerous vacuum in the bore.

When you are about to fire a piece that has been loaded for some time, inspect your priming, and ram home the charge afresh. This precaution is indispensable with reference to a blunderbuss, carried, as it is, in a swivel, and down the bore of which the ball has very probably been forced by its own weight, and the motion of the horse: it is so likewise with a pistol carried in a holster pipe and for the same reason.

One excellent precaution in war is to have, and insert ~~down~~ the bore of the pistol, when it is in the holster pipe, a wooden mandrel of the same length, less the space occupied by the charge. Your loaded pistol can then always remain without inconvenience muzzle downwards in the holster pipe. When about to use the pistol, leave the mandrel in the holster pipe.

There are some arms which, being worn out, permit the cock to fall down, when it is at rest. Never, therefore load these arms before-hand, because, if you carry them loaded either in the

holster pipe, or in the bucket, a slight jolt when trotting, may cause them to go off, and inflict a severe wound either on yourself, or your horse.*

A pistol is often lost, either by dropping from your hands, or by falling from the holster pipe, when your horse comes down. Very often, too, when a man has missed his shot, and he wishes to draw his sword immediately, he seeks in vain for a long time for the opening of the holster pipe, covered by the flounce; and is thus left defenceless. We must therefore not neglect to attach a laniard to the pistol.

If, after having discharged your pistol, you are required to make immediate use of your sabre, no precious time must be lost in an endeavor to find the opening of the holster pipe. You should confine yourself to casting your pistol to your own left rear, the laniard being fastened round your body on the right side, and the pistol hanging suspended between your portmanteau and your left thigh. The circle, which the laniard makes, takes it up, and shortens it, so as to prevent the pistol from dragging on the ground, or knocking about between the horse's legs. You will be then able to draw your sword without delay.

Your cartouch box should always have its full supply of cartridges; and in order to this effect, you must take care of those belonging to men killed or wounded.

The cartouch box should be often inspected, as to the state of the contained cartridges. They are very easily injured, especially if their reduced number allows of their mutual friction. As soon as a cartridge is broken, it should be wrapped round with paper, and those that are most chafed should be the first used. One mode of protecting them against friction, when they do not fill the cartouch box, is to compress them firmly together by paper or rag, stuffed into the vacant space of the cartouch box.

After having been exposed to rain, the charge of the piece should be examined, in order to ascertain whether the damp has penetrated to the powder, the priming should be renewed, and the touch hole pricked.

If we have reason to suspect that the charge has become damp, the piece must be unloaded by means of the worm, and loaded afresh.

* Arms of this description ought invariably to be exchanged.—TRANSLATOR.
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The constant care of a trooper ought to be to protect his fire arms in the best possible manner from damp; consequently, every time that they have become so, he will wipe them dry.

A very good precaution to take, when not in action, is to wrap a greased cloth round the hammers. This cloth is kept on, in the blunderbuss by the lock cover, and, with the pistol, its thickness presents the advantage of holding the weapon more tightly in the holster pipe, and prevents its suffering by the wear and tear of the horse's motion, and friction.

Q. How do you make use of the sabre?

A. The sabre is the arm in which you ought to place the most confidence, because it is rarely that it fails you by snapping in your hands. Its cuts are surer in proportion as you direct them with coolness, and as you hold your arm properly.

It is the thrusts that kill; cuts only wound.

Give the point, then, give the point, as often as you can, and you will dismount every man you reach, you will demoralize the enemy, who may escape your thrust, and you will add to these advantages, that of never exposing yourself, and being always at your guard. In the first Spanish wars, our dragoons acquired such a reputation for their skill in thrusting, as to demoralize the Spanish and English troops.*

Q. Ought one, in war time, to make use of all the cuts and guards laid down in the Regulations?

A. No. As a general rule, never attempt to deliver a cut, except when your enemy is either in front of, or in line with, you; but the moment that he is in your rear, parry with rapid circles.

Q. Which is the most powerful cut?

A. The reverse one. You should never deliver it except against an enemy, whom you are in the act of passing, or against a cuirassier, whom it would be too hazardous to attempt to wound by a side thrust.

Q. Where ought you to aim at?

A. At the height of the stock; because the rider, thus threatened, will naturally bow his head, and so you will take him

* This assertion will be as great a novelty to our readers as it is to ourselves.—TRANSLATOR.

in the face; if you miss your aim, you will cut him on the shoulder and fore-arm, and thus put him *hors de combat*.

Q. How should this cut be delivered?

A. Your first care must be to grasp the hilt of your sabre firmly in your hand, so that the blade may not turn in it, causing you to strike with the flat instead of the edge: next you must make it a drawing cut, so that it may enter more deeply.

Every cutting tool is a saw, more or less fine, which produces its effect only by traversing horizontally the object that it is brought in contact with. To produce this effect at the moment of the delivering of the cut, bring your hand to the rear: in this consisted the whole secret of those terrific sabre cuts of the Mamelukes.

Q. What particular care should be observed in delivering the point?

A. I. To make sure of your thrust. II. To carefully select the proper part of the object, the side is the most accessible. III. If he attacks you higher, to meet his blade, touching him on the side, so that you may penetrate between his ribs. IV. To give the full extent of the cut with rapidity, and to draw back the elbow immediately to the rear, especially if our adversary shews front to us. I have repeatedly seen troopers sprain their wrists, and be rendered unfit for service for a whole campaign from having delivered a point unskillfully: this is easily explained, because they oppose nothing but their fore-arm against the considerable weight and impulse of a mounted man. If they had brought their arm to the rear, they would not have been injured, and would have found themselves in condition, either to renew their attack, or to come to the guard.

As soon as you have delivered a point, if the enemy does not surrender, give him the back stroke: it was in this manner that *Guindet* killed the Prince of Prussia at Saalfeld.

Q. How should you sharpen your sabre, so as to make it cut properly?

A. When a campaign is decided on, the order comes suddenly. Every one hastens to prepare himself during the few hours allotted to him; hence arises the little attention bestowed upon the sharpening of the sabres, which is a grave evil, which is always admitted when there are no longer means to remedy it.

It is not a trifling matter to sharpen a sword properly. The French muster has a bevelled edge (*an error which no nation, whose troopers know how to use a sabre, commits*); the greater the angle of the bevel, the less deeply can the blade enter. If, by your mode of sharpening, you augment, instead of diminishing, this defect, you render it almost useless for cutting: you might as well have a walking stick for your sabre.

Therefore remember that the less the angle of the bevel is, the deeper your sword will penetrate.

Under the empire, the cavalry carried no hatchets, consequently, the sabre was used in lieu thereof for all the work of the bivouac, and thence both blade and edge speedily became in a sorry state, but the troopers, who knew what they were about, corrected this abuse of their weapon which they were compelled to commit; I., by only using the lower part of the blade for cutting wood, pickets, &c., and reserving the largest possible part of the upper portion for action; II., by always carrying a small and very fine file about them, which enabled them to set their sword when it had lost its edge.

I advise you to adopt this file, or a ragstone, and whenever you make use of either one or the other, traverse the blade from top to bottom, taking the guard for the base, in such a manner that the invisible teeth of your saw may point backwards.

Two causes powerfully contribute to rapidly blunt the sword. The first, is the carelessness in returning the blade to the scabbard, or in drawing it; the second is the jolting and shaking of the said blade in the scabbard, after it has been returned. To neutralize the first of these, do not pitch, as it were, your sword into its scabbard, but let it slide down gently into it, taking care to avoid all friction of the edge.

To remove the second, let the wooden sheath which lines the interior of the scabbard, and protects the blade in it, be properly made, and fit the blade tightly, so as to prevent its shaking about in it.

One thing which is very destructive to blades is damp. Be on your guard against sheathing your sword before you have wiped it; not only rain, damp, fog, may cause rust, but even the least sensible dampness of the atmosphere is attracted to polished surfaces, and insinuates itself into their pores. If you

return the sword damp, it communicates its humidity to the scabbard, and you will have subsequently a great deal of difficulty in drying it. A good precaution in war is to keep your blade always greased.

If, in consequence of heavy rains, water has found its way down the scabbard, and, having penetrated to the bottom, is a permanent cause of rust to the point of the sabre, take out the wooden lining, and put the empty scabbard in the sun's rays, or near a fire: if near a fire, do not heat it to that extent to cause the solder to melt, but carry on the operation gently, until you have evaporated all the damp. If these means prove insufficient, pass the scabbard lightly, and, at several intervals, through hot ashes.

Often a dismounted trooper, having his sword in his hand, rests the point of it on the ground: the inevitable result is the rusting and destruction of the point, so that it cannot be depended upon in the day of action.

As a general rule, be as careful of the blade of your sword, as you are of that of your razor.

Q. Is the lance a very powerful weapon?

A. The lance is the naked weapon,* whose moral effect is the most powerful, and whose thrusts are the most deadly.

Q. Ought one, then, in action, to use the lance as laid down in the Regulations?

A. No. As a general rule, the trooper may be considered as the centre of a circle, the circumference of which is described by the extremity of his weapon. The lancer ought never to deliver a thrust beyond the half circle in his front; the circular parries ought to cover the other half.

Q. Why?

A. The thrusts are only to be depended upon when the nails are uppermost, and when the fore-arm and body support the direction of the arm. When these two indispensable conditions do not exist, we must not hazard thrusts which the enemy can but too easily parry, and which will disarm us; the least defect of these chance thrusts is their inutility, and in war *inutility* is synonymous with *ignorance and danger*.

* All edged weapons are termed by the French "armes blanches," in contradistinction to fire arms "armes à feu."—TRANSLATOR.

Q. Which are the thrusts, then, to which you would circumscribe the use in war?

A. To the front, to the right, to the left, point; to the right and to the left against infantry, point; to the right, to the left, right and left, parry.

Q. But in the event of the enemy's cavalry following and pressing you close?

A. You must make use of to the right, to the left, right and left, parry, which will become powerfully offensive, if you employ them properly.

In fact, the blow cannot fail of hitting the man or the horse's head, and the weight of the weapon redoubling the force of the *momentum*, will immediately dismount the rider, or stop dead the horse that is struck. I have seen a hundred examples of it, and I may cite, amongst others, that of the gallant captain *Bro* (at present colonel of the 1st lancers.) who, near Eylau, in a charge, which we made against the Cossacks, conceived that he had already overpowered one of them, whom he had attacked on his left, and who held his lance to the right front, when this last named, raising himself in his stirrups, and executing a rapid circular parry, knocked the captain to the ground; his horse was taken, as he himself would have been, but for a bold and very skilful charge, which major *Hulot*, then commanding the 7th chasseurs, executed: I saw the captain's wound dressed; his shoulder was laid open, as if by a sabre cut.

Parries ought always to be made vigorously, and by a motion of the fore-arm, because, if the body participate too much in them, the saddle will be shifted, and apt to turn. The science required in either offensive or defensive parries is to be able to calculate in what period of time the lance can traverse that portion of the circle, which it has to describe.

I have seen old Cossacks, charged by our troopers with short arms, (sabres,) shew front, and quietly await them, not with their point to the front, because they guessed by the determined manner of the attack that their thrusts would be parried, and that, once closed with, they were done for; but holding their lance to the right front, as in the first motion of the *left parry*, then replying to the attack by the *left parry*, turn the attacking party aside by this movement, and, wheeling to the left, were naturally pre-

Pared to assume the offensive, by following their enemy on his left side.

Q. How do you deliver the thrusts of the lance in action?

A. I repeat, the lance must always be grasped with the whole hand and firmly; nails uppermost, and never to hazard a motion which requires the nails to be turned downwards, because the weight of the weapon, at the slightest parry of your adversary, will cause you to let it go. The Regulations do not sufficiently enter into the details of this motion; *keep then the wrist turned half outwards.*

It is necessary also that the shaft should always feel the body and the fore-arm; the direction of the thrusts will be much more certain, and delivered with greater force.

You must also contract your motions; they will gain thereby in celerity and certainty. To carry the arm too far to the rear, in order to give subsequently a thrust in advance, is useless and dangerous: your thrust has always sufficient vigor, strength, and length, to pierce a man through.

Q. You object then in toto to the motion of to the right rear thrust?

A. I advise it in only one solitary case; that of a general movement of retreat before an enemy, or when a troop, shewing front, is surrounded; then the lance sloped to the rear by the rear rank, as that of the front rank is to the front, might produce a useful effect.

In campaigning an officer should frequently inspect his lances, and require that they should be properly sharpened and greased: the thrusts of a lance in good order are nearly always mortal, when they are directed at the body.

I have seen troopers of our army receive as many as twenty-two thrusts from the Cossack lances without dying for all that; or being even laid up from active service.

Q. How did that happen?

A. From the bad description of arms these Cossacks had; the little care which they took of them; and a reason, which it may be as well to explain.

The lances of the Cossacks, who were engaged against us, were only armed at one end; the trooper, when he had dismounted, in order to prevent his weapon lying on the ground, struck

the point into it, and thereby blunted it. Consequently, remember that, on no pretext whatever, are you permitted to drive your lance into the ground by its point ; and that it would be a hundred-fold better to leave it lying on the ground than have it standing upright at such a price.

The French lance requires to be improved ; the ash, of which its shaft is made, is too heavy, which hampers the celerity of wieldng it, and galls the horse on the withers when the weapon rests in the boot. This wood does not redeem this defect by its toughness, for being shaped taperwise, and the fibres thereby becoming interrupted, the lance easily breaks in such a manner as to be incapable of repair. Another defect is the too great size of the streamers, which offering too great a hold to the wind, the shafts are rapidly bent, which operates against the certainty of the direction of the thrusts, the quickness and lightness of wieldng it, and, in columns of route, uselessly fatigues the horse and the arm of the man by its retarding pressure.

In order to obviate these inconveniences, it is requisite, when the columns are marching, to do away with the streamers, and only append them to the staves, when a necessity arises of being recognised as friends or enemies, to place the lance alternately in the left boot with the right one, and often to take them entirely out of those boots, and make the trooper carry them.

The cloak rolled up may be looked upon as a defensive arm.

The custom of folding the cloaks, and crossing them over the chest in the day of battle, gives us three advantages. The first is that of leaving the entrances to the holster pipes clear ; the second is that of allowing the bridle hand to be nearer the forehand of the horse, which enables the rider to guide him better ; and the last is that it tends to ensure the safety of the trooper. But it is requisite that the trooper should direct his attention to two points ; in the first place, he must so 'roll and fold up' his cloak that it does not inconvenience him, and, in the second, to take care in a charge that he does not incur the risk of being seized by it, for he might incur the danger of being dragged off his horse and taken prisoner.

It is a disgrace for a man to lose his arms ; nevertheless, there is one case in which a lancer may be permitted to lose his lance, and that is, when he has transfixed his adversary with it. I have seen several instances of thrusts of the lance so well delivered,

that the weapon, after having entered between two ribs, after having penetrated the breast bone, has been all but incapable of extraction ; the dying man, bowed together with pain, and carried away by his horse, has dragged after him both the lance and the lancer, which latter vainly attempted to extricate it.

At Reichenbach, the bravest lancer of the regiment was killed in this position, despite of my orders, owing to an infatuated and mistaken sense of honor. It was in vain that I cried out to him, "your lance has done its work ; its value has been received !"; he believed me not and, cut off from his party, he sunk overwhelmed by numbers.

Near Lisle a young slight trooper of the same regiment found himself similarly situated ; I made him abandon his weapon ; the Prussian, whom he had transfixed, dropped fifty paces off ; we regained the ground, which we had lost for a few seconds, and the young trooper, dismounting in order to disengage his weapon, found that he could only succeed in doing so, by drawing it carefully out in the same direction that it had entered.

At Waterloo, when we charged the English squares, one of our lancers, not being able to make any impression on the rampart of bayonets opposed to us, raised himself in his stirrups, and discharged his weapon like a *Djerid*: the lance transfixed a private, whose death would have opened up a passage to us, had not the gap been instantaneously filled up. This was a lance lost honorably.

Q. When you capture arms from the enemy, what is to be done with them ?

A. If you are in want of them, you keep them, and in this case, you send them to the rear : if you do not require them, they should be broken up.

Q. How do you break up a sabre ?

A. By placing the blade horizontally across two stones supporting the two extremities, and then throwing a heavy mass upon the centre, which is unsupported ; care must be taken that the two fragments, in separating, do not fly up, and wound you.

Q. And, a Scabbard ?

A. In the same manner. You will not always break it by this method alone ; but you will render it unserviceable.

Q. A fusil ?

A. You throw away the priming, let down the cock, and then, seizing it by the muzzle, you strike the butt forcibly against the ground at an angle, when it will break in two at the small of the butt. The soldiers call this, *making a ham*.

Q. *Why do you throw away the priming?*

A. Because the shock might make the cock fall, and discharge the piecee, thefeby wounding the man who was breaking it up.

Q. *But why, after having thrown away the priming, do you let down the cock?*

A. Because the touch holes of common musquets, especially those belonging to foreign troops, are very large, and the powder escaping by that aperture, and, falling into the pan, if the dog-head were to fall in consequence of the shock, sparks might be elicited, the piecee be discharged, and the man breaking it up be injured.

To render the destruction of arms more complete, the fragments might be thrown into the water, if any should be conveniently near to the field of battle.

Q. *And how do you destroy gunpowder?*

A. By throwing it into the water; scattering it upon the ground in such a manner that it cannot possibly be gathered up again; by blowing it up. In employing the last method, care must be taken to undo the containing packages, of whatever description they may be, for fear of an explosion ensuing. Loaded shells must be destroyed by throwing them into the water.

Sometimes, you will hear that such a soldier, or such an officer has been decorated on the field of battle, for having drawn out the burning fuze from the shell of a howitzer or mortar; and books, as veracious as the "Victories and Conquests," repeat similar balderdash: beware of believing these fooleries, and of exposing yourself in similar enterprizes; you will only reap death as the reward of your useless courage. The fuze of a projectile is always exhausted by the time it reaches you. The burning fuze, driven home by the driver and setter cannot be extracted.*

* Nevertheless there are instances of shells, in which the fuze has been set too long, and time has been thus afforded sufficient to enable them to be hurled over the parapet of the work into which they had been thrown.—TRANSLATOR.

CHAPTER VII.

ON DISCIPLINE.

Q. What is discipline?

A. The soul of armies! no discipline, no army!

Q. What is the prime agent of discipline in war?

A. Honor.

Q. How do you stimulate it?

A. By approbation, or by censure.

Q. Is censure sufficient?

A. Yes, very often, because it is public, and enters deeply into generous souls on account of the serious position in which they are placed.

Q. Suppose that it should prove insufficient?

A. You will then have recourse to punishments severer than those inflicted in peace.

Q. Why make this difference?

A. Because crimes committed in war are quite different from those that can be committed in garrison.

Because a different degree of importance attaches to them.

Because men, who thus commit themselves, if they are not recalled to their duty by a sense of honor, are less deserving of favor than in any other situation.

Because the punishments which can be inflicted are fewer, and less graduated.

And, because crimes may be followed by serious consequences, it is the more necessary that the examples made of them should be striking.

In peace, you have not to punish for the desertion of a post, cruelty, cowardice, &c.; and for the crimes which are committed you have the graduated scale of punishments, of restriction, the civil prison, simple imprisonment, solitary confinement, running the gauntlet by companies, &c.: in advanced posts, none of these can be employed. It is necessary, therefore, whilst relaxing the

ordinary punishments in garrison for trifling offences, to strike with severity when we are obliged to punish.

Q. How do you graduate the punishments to be inflicted on service?

A. Private reprimand ; then in front of the troop ; job work ; confinement in the quarter guard ; dismounting the offender for one or more days, and sending him to the advance guard ; dismounting him, and sending him to the rear ; expulsion from the ranks by his comrades ; consigning him to the provost marshal.

The two last punishments ought only to be inflicted for incorrigibly bad behaviour, mutiny, or cowardice.

Q. And rewards ?

A. Rewards have a much more powerful influence on discipline than punishments. The more a war is prolonged, the more this influence increases, because the hardships having rid you at the commencement of the indifferent characters, who lay hold of the first pretext to quit the ranks, and afterwards of those of a weak constitution, you have none but the *elite* of your ranks remaining, who are guided much more by a feeling of honor than by fear.

Q. What graduation would you establish in rewards ?

A. An expression of approbation dropped in front of the regiment ; marks of esteem repeated as occasion offers ; selection for a confidential enterprise, in which the party may have an opportunity of distinguishing himself ; a flattering notice in regimental orders ; if a brave soldier should happen to be dismounted, and there is a spare horse, you give him the preference over every body else ; at the review, you call this trooper to the front, and introduce him to the knowledge of the general ; promotion ; a proposal to admit him into the legion of honor.

The severity of the laws of military discipline ought to be proportioned especially, in their general character, to the disposition of the people they are intended to govern, and, in their details, to the character of the provinces, whence you draw your recruits ; to the dissimilar characters of the men under your command ; and to the degree of comfort or privation in which the army may happen to be.

The application of these laws is perhaps the circumstance which most requires the spirit of observation in the commander.

To treat a Frenchman like a Dutchman, to punish one man the same as another, is ignorance or idleness on the part of him in authority, and never leads to useful results.

In several cases, the application of military laws ought rather to be made by the enlightened conscience of a jurymen, than by the harsh severity of a judge.

Discipline is not an end, but a means: punishment is not its object, since reward equally belongs to it. To conduce to this end, there is required in the commander a constant spirit of observation, which modifies the dryness of the letter, in conjunction with firmness in carrying it into execution.

The basis of all discipline is the study and knowledge of the men under our command. Every good officer, or non-commisioned officer, ought to have the muster roll of his squadron by heart, and be able to recount the details of the military career of each individual.

Q. How do you carry punishments into execution ?

A. It is necessary, especially in war, that crimes should be repressed on the spot, and that punishment should follow them at the same moment. It is thus that example makes an impression on the soldier; and that you escape their reflecting and talking upon the subject, which are the ordinary accompaniments of insubordination, which speedily degenerates into mutiny, if you do not crush it with a heavy hand in the bud.

The crime above all necessary to punish is that of kegging; the instant it shews itself, dash it to pieces like a glass.

However few may be the number of men that you command, there are always some who take the lead: some go straight forward in the proper road; others turn their back to it. Study then both constantly, and appreciate their influence: whenever an opportunity offers, reward the first, for they are valuable examples; and treat the others severely and without mercy, for they are disorganizing plagues. Thus you will deprive these last of the moral influence which they possess; and, if they attempt afterwards to stir against your authority, you will have only themselves to deal with, instead of an organized conspiracy.

I repeat it, that a method, which never fails of producing its effect, and which is the more powerful, when it is employed by

an officer of the most elevated rank, is the having the nominal roll of the men imprinted on the memory, the calling each man by his name, and shewing to him publicly and by a few words, that you know him and will never lose sight of him.

Whatever may be your rank, never take upon yourself to remit a punishment inflicted by one of your subordinates on a man under his orders—it is the destruction of discipline.* If you consider the punishment unjust, or too severe, order to your quarters the individual who has inflicted it, and direct him to mitigate or remit it.

In France, the soldier has less need of liberty than of that justice, which is equally dispensed to all, and which never allows the scales to be turned except by true merit. Let the soldier suffer like his comrades, he will not complain; but let him be a little less fortunate or happy than they, he cries out of injustice: this disposition ought to determine the mode of dealing with him by his commanding officer.

If discipline will not admit of the principle of equality, still we must take care that the prerogatives of command are not stretched beyond their proper limit. In campaigning, there should be an equality in privations and sufferings, just as the chances of death are equal.

It is not proper that the officer should carry his cloak, when the private is not allowed to wear his; that he should warm himself in a house, when the soldier is forbidden to enter it: that he should forestal, for the sole use of himself and his horses, a barn that is capable of sheltering his men; or that he should claim for himself a considerable portion of the rations served out at the bivouac, when the trooper barely receives what is necessary.

It is proper that under every circumstance, he should fly to the assistance of his troopers, whether it be that they are attacked by the enemy; whether an officer of another regiment insults or maltreats them without cause, or whether the rations ordered by the general are not served out to them.

He ought to protect the wounded, the sick under every cir-

* As a general rule, this is good advice; but cases occur, in which young officers inflict an irregular punishment. These must be noticed, and the sentence, if in progress, quashed. The British army is more tenacious on these points than the continental ones, and it serves a good purpose, as the men are aware that they have an ultimate appeal.—TRANSLATOR.

cumstance ; in short, he ought to prove that he is worthy of his epaulettes.

Share with the soldier, and he will share with you, and you will be no loser by this bargain ; you will see some day, when you are in want of every thing, how proud, how happy, this old soldier will be to offer you his crust and his life.

Beware, however, of conceiving that, in order to be popular with your men, it is necessary to be familiar with them : you will thoroughly deceive yourself. I have known officers beloved by the soldier, I have studied them for my own instruction ; they were just, patterns of firmness, and independent of the subordinate cliques, which always attempt to obtain the weather gauge of the commandant : on the field of battle, they were distinguished for their bravery ; and, in the bivouac, they were vigilant, as hard upon themselves as upon others, liberal of what they possessed, and they spoke with a soldier's tongue : this was the whole secret of their absolute power, of the attachment partaking of fanaticism, (*seidisme*), which they inspired. Discipline under them was instinctive, no one ventured to infringe its laws, and, if accidentally an instance of indifference to its duties occurred, the justice inflicted by his comrades rendered the punitive interference of the commandant unnecessary. Under a man of that stamp, every thing is easy, a regiment is a family, and that family enacts prodigies.

Q. What is it which gives most strength to the laws of discipline ?

A. The respect which the commandant inspires.

Q. What is it which most renders their application easy ?

A. Subordination.

Q. What ensures subordination ?

A. An intimate knowledge of the graduated scale of authority.

Q. What is it which ensures their useful effect to orders ?

A. First, the firm and brief tone in which they are delivered ; next, inflexibility in carrying them out. Orders, given and supported in this manner, are always and promptly obeyed.

Q. What produces a thoroughly understood discipline ?

A. Unity and promptitude of action.

Q. What produces unity of action ?

A. Esprit de corps, which, in warfare, might more correctly be termed the soul of the corps.

Q. In action ought we to obey the orders given to us by every officer, who may be our superior in rank?

A. We ought to be very respectful to every officer, whatever arm he belongs to; but we ought to obey no orders but those given us by our immediate commanding officers, whether those chiefs belong to our own corps, or whether, when they do not, our officers have told us to acknowledge them.

Q. What are the punishments to inflict upon an officer?

*A. A private admonition; a public reprimand; simple arrest, which consists in marching him in the rear of his squadron, and in depriving him of command for a time; close arrest, which lies in being deprived of command, and his sword, being lodged in the quarter guard, and, when the regiment is *en route*, marching ahead of the trumpeters: then, publishing his name in regimental or brigade orders; being sent to the rear; trial by court martial; or being driven out of the regiment by his brother officers.*

Q. Must a commandant make use of all these punishments against his officers?

A. The commandant of a regiment, in which you are obliged to resort to them, is the chief culprit, and especially worthy of punishment; it depends upon him to prevent ill conduct amongst his officers, by elevating, from the very first, the gamut of their honorable susceptibility, and personal dignity, to the height of their position.

If, by a most extraordinary chance, there should be found amongst the officers, a man deaf to this law of conscience, who does not understand the nobly paternal language of his colonel, he must not hesitate to exclude him from active service, either by sending him to command a paltry depot in the rear, or by delivering him to the justice of his peers, whose unanimous sentences, always just, are always ratified by superior authority.

Q. You then concede to a body of officers, and to a corps of non-commissioned, corporals, and privates, the right of sitting in judgment on one of its members?

A. I concede to every body, whose sole stimulant is honor, the right to preserve it inviolate, and to drive from its ranks any of its members who may stain it. Only I require that these decrees should be unanimous. The universal tribunal is infallible. It is a second conscience.

CHAPTER VIII.

ON THE STUDY OF THE GROUND.

DESIGN OR TOPOGRAPHY.

The country, which is the theatre of war, is of two descriptions, *practicable* and *impracticable*. The study of them ought to be directed to three principal points.

I. As to their nature, whether easy or difficult, with reference to the different descriptions of arms which are to pass through them.

II. Their positions with reference to offensive and defensive operations.

III. Their character and distances.

Q. *What is a defile?*

A. Every pass, which, by becoming narrower, tends to diminish the front of an armed body, whether in line or in column.

Q. *What is a table land?*

A. The top of a mountain, on which you can establish yourself.

Q. *What is a crest?*

A. The summit of a mountain upon which you cannot establish yourself in a military point of view.

Q. *What are the obverses (versants) of a mountain?*

A. Its opposite declivities.

Q. *What is a causeway?*

A. A road raised across impracticable country.

Q. *What is a position?*

A. A spot which presents to an armed body facilities to fight thereon at advantage, even under a disparity of forces.⁽¹⁾

Q. *What is the best offensive position?*

A. That which is the most threatening for the enemy, and which best facilitates the attacks which we direct against him.

¹Jacquinot de Bresles.

Q. What is the best defensive position?

A. That which offers the greatest number of insuperable obstacles to the attacks of the enemy.

Q. Is it of importance that a light cavalry officer should know how to draw?

A. It is just as indispensable to him as the knowledge of writing.

Q. How so?

A. Because that very often he will convey more information by tracing a couple of lines than he would by two pages of writing; that a few pencil sketches are more rapidly and easily executed than a formal report, and that they more clearly indicate and arrange the details of the information conveyed than can be done by a report drawn up from recollection of a reconnoissance that has been extensive and occupied much time.

Q. Does not drawing also offer other advantages?

A. Yes; its advantages are immense, as regards actual warfare: it accustoms the eye to make an accurate survey; to estimate distances and the nature of the ground; it retains a faithful representation of what we have seen; and especially it enables us to judge of what may be effected by rapid movements, and of the *à propos* of enterprizes.

Q. Are there yet any further advantages to be derived from it?

A. Yes. As regards the distinguished officer, it affords that of enabling him to judge of the dispositions, and moral impressions, of the men under his command.

A. Can you elucidate the point by an example drawn from local recollections?

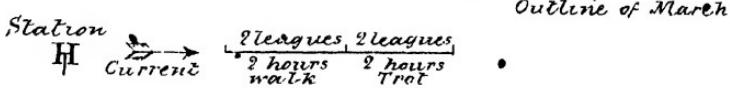
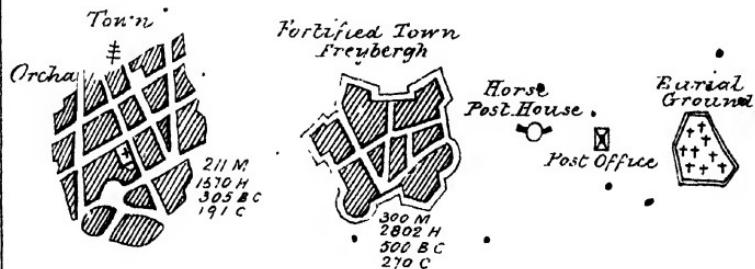
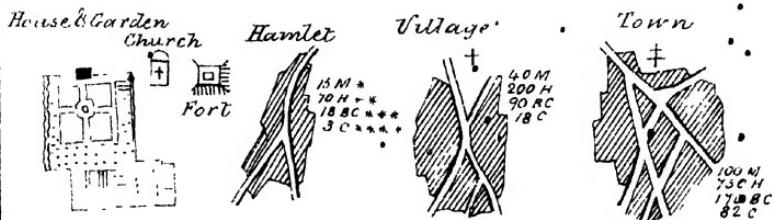
A. The enemy is distant some leagues: an officer is despatched to reconnoitre. This officer attentively marks the road which he himself takes; for it will be the shortest one for him to return by, should he be attacked in front; but, meanwhile, he deeply imprints upon his memory the roads, the foot paths, the practicable ground which here and there flank the road which he takes, in order that, should his retreat be intercepted, he may be able to take advantage of them and render the manœuvre of the enemy useless, so as to return safely and circuitously to the point that he started from, and where he will find his support.



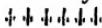
REPRESENTATIVE SIGNS

Plate I continued.

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Battery



Carriages (Park)



- French Squadron
- Enemy's Squadron
- ▲ French Battalion
- ▲ Enemy's Battalion
- ★ French head quarters
- ★ Enemy's head quarters

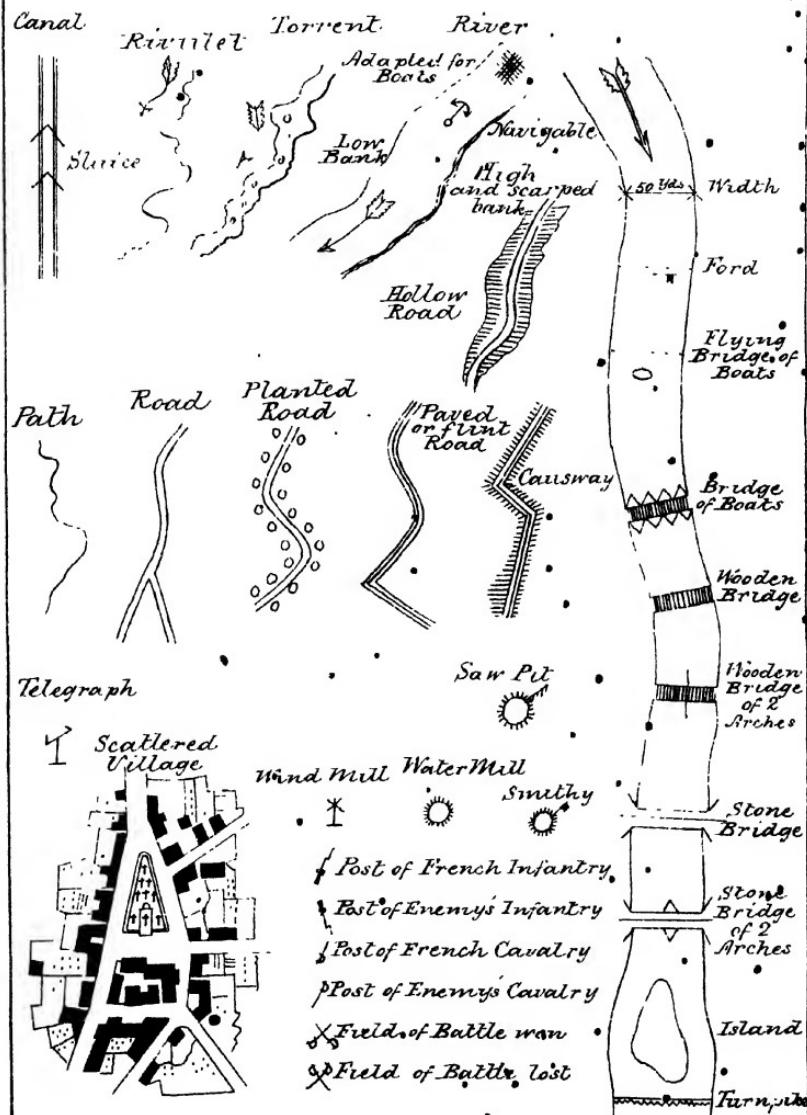
Explanation of Letters
prefixed to an outline of
hamlets, villages, towns
& cities.

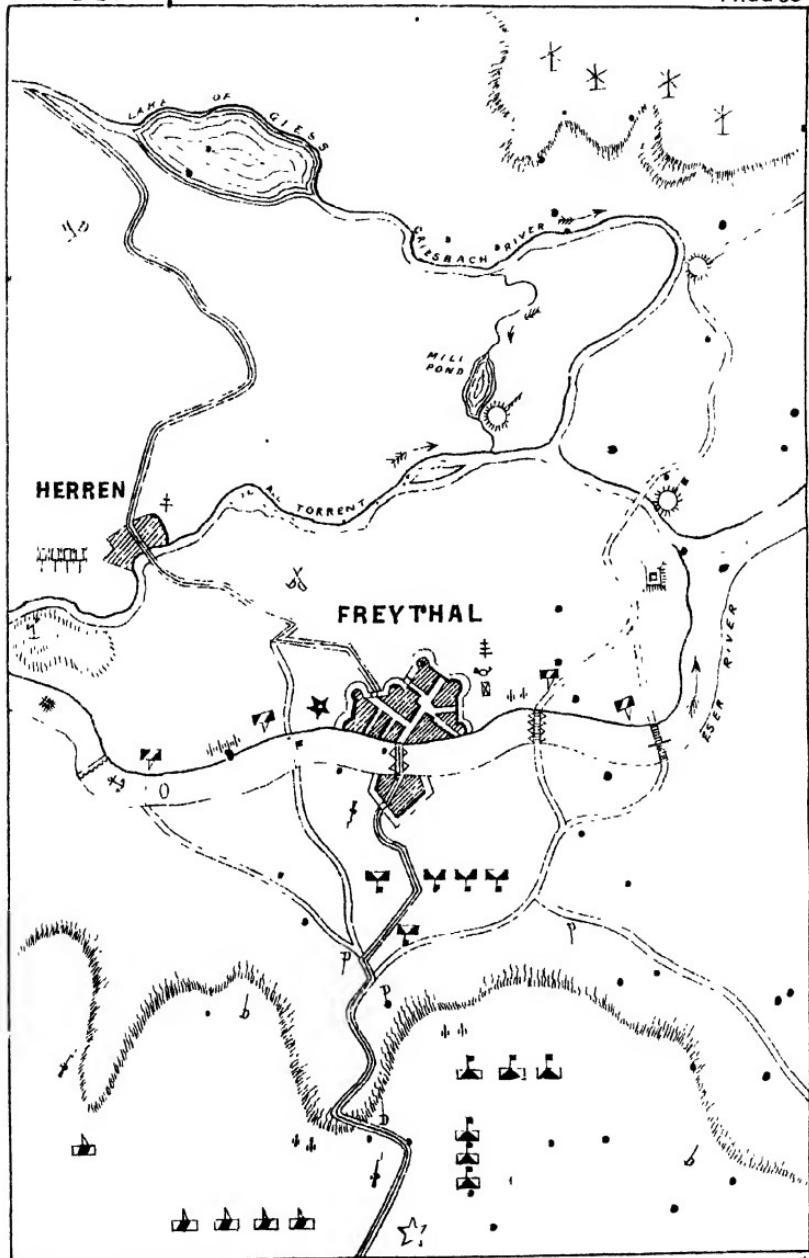
- * M horses (maisons)
- ** H inhabitants (habitans)
- *** BC horned cattle (boeves cornes)
- **** C horses (chevaux)

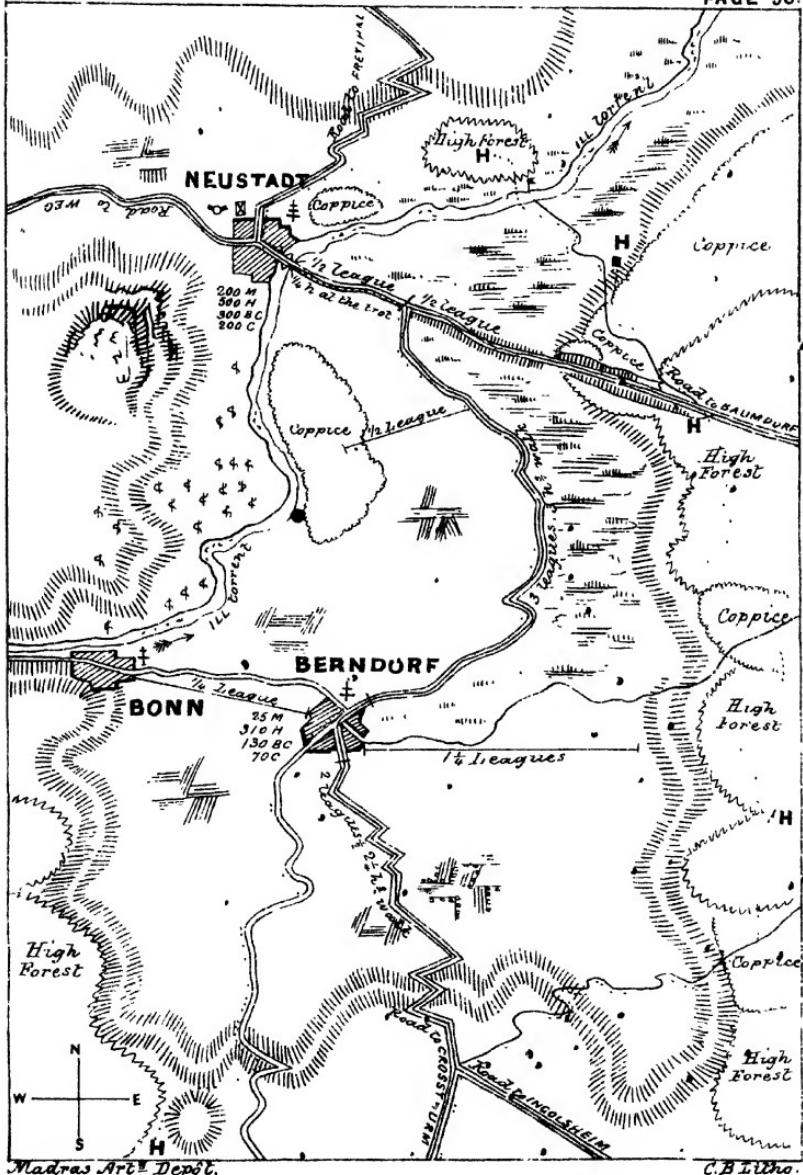
REPRESENTATIVE SIGNS

Plate I, continued.

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Before him lies a naked and uniform plain. Two villages are near one another; they very closely resemble each other; but the steeple of the one terminates in a point, whilst that of the other is rounded at the summit. It is in the direction of the pointed steeple that his route lies.

He arrives at a wood. Two roads present themselves; they are equally broad, and open upon a uniform slope. A boundary appears on the right of the one which he ought to take. He advances. He crosses a marsh, and then arrives at a *quincunx*. Six similar roads abut upon it. On the right of the one which he quits is a large dead tree; on the left of the one which he ought to take stands a post.

He continues his march. A glade opens on his right. The wood assumes a deeper character. Then a barrier presents itself; it is open. Alongside of it are a clump of brooms in blossom, a deep ditch recently dug, a heap of broken stones, and a large solitary poplar. He issues from the wood and finds himself on a plain. After marching ten minutes, the enemy shews himself in strength, charges briskly, and compels an instant retreat. The guide takes advantage of the moment of surprise to effect his escape. The officer in command is left to his recollections, which are so much the more vivid, inasmuch as the habit of drawing has the more deeply imprinted on his memory the forms and outlines of the objects, which he had observed in his forward progress, and inasmuch also as he had often turned his head in order to recognize them under their double aspect. He is aware that, in returning, he ought to have on his right those that had been on his left, and on his left those that had been on his right. The poplar, the heap of broken stones, the newly dug ditch, the clump of green and yellow broom, the open barrier first, next the dark wood, then the glade, then the post, next, the large dead tree, the marsh, the boundary, and, finally, the pointed spires, are the guide posts, which bring him back to camp.

The habit of drawing imparts to the memory a faculty, which may be termed instinctive; it is that of seizing, so to speak, in spite of yourself, and without being distracted by other thoughts, the forms and colors of the objects which present themselves to your view. The preceding example is drawn simply from the general outline. I will now give one, in which the colors of the objects will answer as well as their contour.

A partisan, at the head of 100 troopers, leaves the bivouac at daybreak. He is in an open plain, and he wishes to conceal his march from the observation of the enemy. A dark and not very thick line appears on his right; can it be the enemy? This would be very surprising, for a reconnaissance was made in this direction the previous night, and he was not met with there: moreover, the front of this line is not drawn up according to the rules of military art; for it in no way fronts our troops. Let us look at it attentively—The line is immovable. Is it cavalry or infantry in line? No; for the line is not broken by regular intervals of equal widths; and, moreover, the upper part of this line, although tolerably parallel to the lower one, is nevertheless full of undulations.—Can it be a wood?—No; the line is not deep enough. What can it be then?—Is it a hedge? It is long, uniform, and sufficiently high to masque a column. He proceeds towards it, and passes alongside of it, keeping it between him and the enemy. Arrived at the termination of this hedge, he perceives, at the distance of half a mile, a village, the name of which he obtains from his guide,* and which is found to be on the road which he ought to take; but, in order to reach it, he must discover himself to the enemy. He halts, and perceives that the mists, drawn up by the sun, lie thicker and heavier to his right, and extend in a sinuous direction towards the village. The grey line, formed by them, becomes every instant finer. The line stretches sufficiently near to and parallel with the reverse flank of his column. He divines that it can only be originated by a brook pursuing its course through a hollow. He turns to his right at right angles, and moves perpendicularly down upon it, in such a manner that his movement is masked by the hedge, which he is quitting, enters the hollow, turns to his left, follows the course of the brook, and gains the village.

After having skirted some orchards during a quarter of an hour, the plain again opens in his front. A thin, white, short, line shews itself over the green and brown shades of this plain, and reappears a league further off. It is the road of * * * *, which he has been directed to cross. But what direction does it

* Having his guide with him up to this point, a man so well acquainted with the country, as to be able to tell him at once the name of the village, the partisan could surely have ascertained by enquiring from him what was the nature of the dark line that he saw, without being obliged to speculate thereon.—TRANSLATOR.

follow between the two points where it is visible? A carriage proceeding along it informs him by raising the dust. He attentively observes this carriage during its progress; and, when it reaches the point, which he is most solicitous to know the position of, he directs his course upon it, and crosses the road.

He descends a slope and perceives a wood afar off. He observes it attentively, and remarks that the right portion of it is of a different color from the left. The first is of a deep green mingled with a bluish tinge: the other is generally of a livelier green: its shades are less dense, and here and there they are parted by white stripes. He does not hesitate to direct his course towards this last portion of the wood, which ought (from its appearance) to be planted with acacias and birch trees, which grow upon dry, firm, and poor land, and consequently is a ground easily traversed, whilst the first must necessarily be composed of elders and willows, which are always indications of marshy and impracticable country.

He reaches the mountain covered with fir trees. He continues his march, and, all of a sudden, the sombre hue of the forest is interrupted, and allows him to perceive below the foliage of the trees, a tinge of a less lively green, and verging towards the blue: here he has, beyond doubt, the * * * * ravine, through which runs the * * * torrent. He turns to the left, and soon perceives the plain. The more the color of the horizon is less distinct, and merges into that of the sky, the farther does the horizon lie from him: the more marked that it is and clearly defined from the sky, harmonizing with the nearest details of the country. the nearer is the horizon to him. This remark is the basis of all *aërial perspective*. Our eyes and our judgment must be accustomed to these things to enable us to come to a correct decision and to rectify the calculations indicated to us by this perspective. This is very easy whenever we are marching, for nothing is more simple than to lay down mentally the distance of a league from the spot where we are in the direction in which we are proceeding, and then to determine a certain rate of travelling for the march: on our arrival, we refer to our march, in order to ascertain whether our calculations were correct.

The atmosphere is blue, consequently the greater the mass of it between you and any particular point may be, the more that point will blend with the blue of the sky. With a little compara-

tive attention and skill, by taking as a basis, the general scale of the softening down of tones, setting out from the spot where we are up to the extreme verge of the horizon, we can calculate quickly and accurately the whole and the intermediate distances.

The partisan quits the wood, and issues into the plain. The enemy surprises him and attacks him there; seizes the road by which he has just passed, and forces him into some meadows which lie to his left. These meadows are green; but, on the left, their green color merges into blue, some willows fringe it; on the right hand, on the contrary, their green is like that of the vine. The partisan retires rapidly towards the right, because he knows that these meadows contain small rushes, which always indicate the presence of water, or of boggy ground, from which he could not extricate his horses, if he brought them into it, while the virous green of meadows shews the ground to be dry and hard.

Proceeding onwards, he passes along the banks of a river, which appears to him to be deep, and over which he can find no bridge; all of a sudden, a brown mark interrupts the green of the turf on the banks of the river, a similar appearance presents itself on the opposite bank, and both are perpendicular to the course of the stream. It is a road, and can indicate nothing else but a ford. In fact, he betakes himself to it with confidence, for the water is less green in this spot; the bottom, composed of brown pebbles, is visible and directs his march aright. Having succeeded in placing this obstacle between himself and the enemy, and surmising that, having been discovered, his expedition has no longer any prospect of succeeding, and that the chances of heavy loss are much more numerous than those of success, he makes a *detour*, and consulting the course of the sun, and the successive landmarks which his memory of the ground recalls to him, he returns to camp.

Q. It is necessary then that a light cavalry officer should learn to draw, in order to obtain a correct eye, and should go through a topographical course?

A. It is indispensable, if he wishes to become a distinguished officer. I even think that it would be highly useful, if this course were to embrace colored representations of aerial perspective. In pushing to its highest extent the talent of topographical drawing, the officer will find numerous opportunities of being extremely useful to the generals commanding the advance guards, and of acquiring a reputation which will justly advance his promotion.

Q. But this study will take up much time, and will consequently be impracticable under the actual state of affairs?

A. For that reason we can limit ourselves to the acquisition of the prompt knowledge of certain conditional topographical characters, which, in a few days, can be fixed in our memory, will find themselves readily at our pencil's point, and the employment of which will be eminently useful in assisting the reports of reconnoissances.

Q. What is topography properly so called?

A. Topography is the foundation of all military operations. The study of it need not be too deep. Whatever knowledge we may have acquired of the enemy, even of the force which he may have at his command, and every enterprise which we may undertake, whatever may be its nature, depends for the success of its execution on our knowledge of the ground. (L. R. A.)*

Q. Ought an officer of light cavalry to trust implicitly to the maps which are sent to him?

A. No. He ought rather to look upon them as a useful sort of guide, than as a literal transcript of what really exists. He ought never to forget to rectify upon his map the errors which may have crept into them, and to add such useful details as may have been omitted in them. He ought to reflect that the older the date of its publication, the less correct it must necessarily be; for often, in the lapse of a very few years, some villages disappear, others spring up, others, again, become united, and confound their names; the direction of roads is changed, rivulets undergo modifications of their courses; tanks become dried up, and are devoted to agriculture; fords are replaced by bridges; bridges are knocked down, and rebuilt at more distant spots; lands, covered with forests, heaths, marshes, fields, vineyards, meadows, undergo mutual changes with reference to what they are designed for, and to their produce, and consequently to their topographical forms.

He ought also to bear in mind that the small scale, on which the majority of maps are drawn, is often the source of errors. Thus, I repeat, the officer ought to look upon the map, which is put into his hands, as a very useful assistance especially as regards the direction of his march, but which, as far as the details go, is not entitled to a blind confidence on his part.

* L. R. A. On every occasion that I have made use of the very words of *M. de La Roche Aymon*, I have not failed thus to distinguish the place. -- NOTE BY THE AUTHOR.

Q. Point out to me the conditional topographical characters, which you say are so easy to be remembered and to draw ?

A. I am about to do so ; first drawing these characters separately, and then throwing them together into one general example, and which will apply to the chapters upon Reconnoisances and Reports.

It is proper that an officer should have a large sheet of paper on which to trace gradually the progress of his march. It is almost always easy for him to lay down this plan upon a scale that is not too small, because he can halt and alight every time that he has any thing to sketch. He can even design on horseback, provided that this paper be previously folded into the most convenient shape, so that such portions of it only shall be successively and by parts presented to his pencil gradually as he requires, and so that the part drawn shall, in succession and by portions, take the place of the blank paper, which is put outside ; but the small pages of a memorandum book will be sufficient, if we take care to follow out upon them, and page by page, commencing from the top and proceeding to the bottom, the outline of the plan. It is upon leaves of the same size as those of a note book that I have here given the second example which you requested of me.

Q. What care ought we to take in tracing out our plans ?

A. I. In beginning them, not to commence upon too large a scale, in order to be able to contain a greater space of country in the same leaf.

II. To trace lightly; in order not to confuse together two lines which run parallel to each other, and represent distinct things.

III. To pay particular attention to the writing and the orthography of names.

IV. When an opportunity occurs, to pass a pen and ink over the pencil lines, to make sure of their not being rubbed out.

V. To lay down the distances carefully, alongside of what we suppose, or have heard of the inhabitants; the time that we have taken to travel the distance; thus alongside of any other interesting intelligence, we will put down for instance: one league, (an horse's walk,) two leagues, (two horses at the trot.)

On comparing the sketch of the plan, which I have drawn for you, with others which you have seen, you will doubtless find the former much more coarsely designed. This was intentionally done; in simplifying the example, I render it more easy to be copied. My object is not to make draughtsmen of you, but rather to put at your fingers' ends in the course of a few days, the useful topographical character of a language new to the greatest portion of you; topographical characters which will not dishearten you by the difficulty of copying them, and of which you can immediately avail yourselves.

CHAPTER IX.

, OF SIGNS OR INDICATIONS.

Q. How many methods have you of becoming acquainted with the movements of the enemy?

A. Four.

- I. The reports of prisoners, deserters, and travellers.
- II. The reports of spies.
- III. Reconnoissances.
- IV. Certain tokens.

Q. From what source do you discover these tokens?

A. From the knowledge of the general usages of war, and the peculiar customs of the enemy. It can only be acquired by a long course of patient observation.

There are general, and there are particular, signs.

Q. Point out the general signs?

A. If we learn that shoes have been served out in garrison; that the troops are furnishing up their arms; that cattle are being collected; these are infallible signs of a march or a movement in some direction or other. (L. R. A.)

If we hear of the arrival of large supplies, of the appearance of some new uniforms in the bivouacs, it is a proof that fresh troops have reinforced the original ones, in order to carry out with them an attack in a short time, for it is probable that those uniforms belong to a general staff, or head quarters.

If you learn that provisions are collected on a certain point, you have reason to suppose that the troops are about to march thither.

If boats be brought from a distance, and collected in great numbers upon a bank, it is an indication that a passage is about to be attempted: if they be set fire to, it is a sign of a hurried retreat.

If beams of wood be collected upon the bank of a small river, on which there are no boats, it is a token that a passage is about to be tried.

If important bridges be broken down, this points out a lengthened retreat.

If, at the distance of some leagues above a bridge, which you are throwing across, large boats be laden heavily with stones, it is a sign that the destruction of your work is meditated. You can only ward off this danger by proceeding beforehand to these boats, securing, running aground, or scuttling, them.

If poles, tarred and covered with straw, be placed at certain distances along the enemy's line, it is a sign of a signal for a general movement.*

If ladders be collected in a bivouac, it is a token of an attack in force against a fortified wall.

If the enemy, on the field of battle, masque his movements, and double up in numerous and deep columns, it is an indication of a powerful attack.

If he deploy, it is the sign that he is taking up a position.

If, in deploying, and in his first line, he collect numerous columns upon a particular spot, this points out the idea that will govern all his subsequent movements, for he doubtless considers this to be his strategical point.

If he cause his artillery to make a retrograde movement, it indicates a retreat.

If he send his hospitals and expense magazines to the rear, it is a sign of a retreat, or of a change of front.

If the fires of the bivouacs of the enemy appear much more numerous, but smaller, and ostentatiously distributed so as to be more than usually visible, if these fires be lighted one after the other, and burn out in a short time, it is an indication of weakness and a retreat.

If the enemy's cavalry, during a retreat, without being vigorously pressed, call in its line of skirmishers precipitately; this is a sign, either of fear, arising from the presence of a defile, and the apprehension of being attacked in it, or of an ambuscade, into which it is its object to draw us.

* These signals are by no means of universal adoption.—TRANSLATOR.

Should he not attack us till the evening, it is an indication that, in this movement, his only object is to reconnoitre, or to cover his retreat; we shall be able to decide more certainly with reference to this second object, if he employ only his cavalry in this movement.

If this reconnaissance be pushed very vigorously, and the enemy remain during the night in advance of his previous ground, it is a sign of a serious attack the next morning.

If, on the contrary, he subsequently fall back, and resume his original position, it is an indication, either of retreat, (as I have said higher up), or of a desire to attract attention in this direction, in order to render us less vigilant upon others.

The marks of footsteps are not only an indication of the direction which a column has taken, but also of its strength, and often even of the motive dictating the march. If the earth be uniformly trodden down, the column was composed of infantry only; if the marks of horses' hoofs be also imprinted on it, there has been likewise cavalry, and if there be deep and wide tracks of wheels, artillery has further accompanied it.

Each of these arms was so much more numerous in proportion as the traces, which it has left, are multiplied and well defined. If the marks be fresh, the column has passed but a short time previous; if the track be narrow, the body was proceeding in profound security, for it must have been in column of route; if the track be wide, it was apprehensive of an attack, for it was marching in column of sections and squadrons, ready to deploy.

If the corn and the fields, which skirt the road, be trampled down, and this corn and these fields bear large and numerous marks of a passage, the cavalry was marching on the flanks of the column, in echelon of squadrons.

Behind a bridge, behind a ravine, in the neighborhood of a village, the traces of footsteps will shew whether the enemy is formed, and on his guard; those of the fires will serve to check the estimate of the force derived from the footprints: these fires will point out not only the time which has elapsed since the bivouac was quitted; but, in addition, the period that the enemy has remained there, by the quantity of ashes, the care and the time expended in running up barracks, the refuse straw lying

about, remnants of earthen vessels, and the entrails and garbage of slaughtered animals, &c.

The fragments of clothing, harness, equipment, and accoutrements, abandoned, cartridges cast away, carcases of horses, bloody rags, fresh made graves, the degree of care with which they have been dug, are valuable indications by which to arrive at the knowledge of the regiments composing this column, of their fatigue and disheartenment, of the number of wounded that they are taking along with them, of the serious nature of the wounds, and of the distinction of the officers whom they have lost.

The dust raised by the march of a column not only indicates the direction of its march, but also of its strength, of its order, and the description of arms, of which it is composed; the greater or less thickness, height, and heaviness, of this dust indicate infantry or cavalry.

If the reflection of the arms be very brilliant, it is probable that the enemy is fronting you; if it be not so, it is likely that his back is turned towards you.

If the hostile body be at a great distance, and you wish to form an opinion of the direction in which it is proceeding, you will take two fixed points in advance of it and on one of its flanks, and by the successive gradation of the distances which divide it from these points, you will easily judge of the direction, and even of the rate, of its march.

The restlessness or insolence of the population of a country in insurrection are sure signs of the approach of the enemy, and of the confidence of the country in his success.

Q. Mention to me particular indications?

A. Now-a-days, when fifteen years of peace have broken down the barriers of frontiers, national intercommunication become easy and frequent, and the sciences in their minutest development are now common to all, particular indications in war are less numerous, because they partake, on the one hand, of a nationality, which has lost its distinguishing characteristics, and, on the other, of a science, whose secrets are patent to all.

Nevertheless, there still exist certain distinctions, which I will endeavor to particularise, pointing out the degree of confidence which we ought, or ought not, to place in certain indications.

The Russians, trusting to their numerous and excellent irregular cavalry, are careless and little on their guard behind the line which this cavalry forms in front of their army; thus, if you can contrive to turn their Cossacks, and escape their lynx eyes, (which is no easy matter), it is more than probable that you will succeed in turning their regiments of the line. The vigilance of the Cossacks, therefore, is not an indication of the vigilance of the other corps in the Russian army.

The great number of skirmishers that the Cossacks throw out in their front is not an infallible indication of the strength of the troops which they cover.

The Cossacks, who are true light cavalry, and faithful to the rational design of their institution, always making war as skirmishers, maintain very weak reserves, whilst other European cavalry may, so to speak, be counted by the number of their tirailleurs, a squadron employed as skirmishers generally, in European regular armies, indicating a force of at least five or six squadrons in its rear.

Practice in war enables one easily to recognize at great distances what is the nation of which the hostile troops are composed; the greater or less correctness of the dressing, the formation of the columns, offer sure marks to an experienced eye, even at the present day when the northern armies have nearly all adopted the grey great coat and the low shako.

If the troops are not wearing their cloaks, it will be much more easy to distinguish them. The colors adopted by the continental nations, with a few trifling exceptions, are as follows:

Russia, green. Prussia, dark blue. Württemberg, dark blue.
England, red. Spain, dark blue. Small German States, dark blue.
Austria, white. Bavaria, sky blue. (France, dark blue.)*

Add to the foregoing, the color of the belts, that of the trowsers, the height of the shako, and the outline of the masses, and you will have sure marks to go by.

The Cossacks are the best light cavalry in Europe; it is that which most completely fulfills the design of its institution (which ought to be that of all light cavalry). This arises from their possessing an instinct resembling that of the wolf and the fox, from

* France is omitted by the author, as he is treating of foreign armies. We have added it to make the list complete.—TRANSLATOR.

their experience in war, the hardness of their frame, and the endurance of their horses.

Should the enemy attack us at day break, it shews us that the action will be general, because he requires the whole day either to follow up his advantages, or to effect his retreat.

The Poles come next to the Cossacks, then certain Prussian regiments, certain Hungarian regiments, the French, the Belgian, the Bavarian, the Wirtembergese, the Saxon, the Germans of the Rhine, the English, the Piedmontese, the Spanish, and the Dutch.* Our place, for the quality of skill does not stand as high as for that of bravery. This arises from a host of circumstances, which it is easy to recognise, and which it would be still easier to correct; but courage throws a great weight into the scale of war, and it is that upon which too often has been laid the *onus* of re-establishing the equilibrium, and of pushing our advantage.

The nations, which possess a good and numerous cavalry, constantly harass the army of the enemy, which they occasionally end by demoralizing, and involving their artillery on the field of battle in hazardous positions: we must therefore adapt our tactics to theirs, so as not to have nothing but a dead weight, and obstinate adherence to method—to the general rules of war, which retains us in a disadvantageous routine. To this end, we must be aware with whom we have to do.

If the Cossacks attack you at night, it is more with the view of disturbing your rest, and wearing you out with want of sleep, than of making a regular inroad: it is generally quite sufficient to shew an undaunted front to them.

If the Prussian cavalry make a night attack, it is a more serious affair; you must not only be on the alert, but manœuvre.

If the Austrian cavalry attack at night, it is to be presumed that it is supported by infantry.

If, during the day time, the Cossacks shew themselves in great numbers on one of your flanks, but without guns, it is probable that they are not supported; if they have guns, it is more than probable that they are sustained in great strength; and they will not be long in convincing you of this by the impetuosity of their attack, by outflanking you, and threatening your retreat.

* Our English readers will not agree with the author as to the place assigned by the author for the English light cavalry. It would more properly follow the Hungarian in the list.—TRANSLATOR.

If the Prussian cavalry shew guns, and these are of a light calibre, and not all brought into action, you may be able to capture them.

The calibre of the guns, which open upon you, is a certain index of the force and description of troops which move with it.

The laws of the *morale* and military discipline differ in every nation, especially as regards the relation in which the soldier stands to the inhabitants of the hostile country in which he is employed. That, which with the French would be a quitting of the camp without order for the purposes of plunder, amongst the northern nations is only an expedition in search of provisions and forage ; we must not then suppose that because the Cossacks, the Prussians, or the Hungarians, have appeared in such a village, they have gone thither in order to reconnoitre. No, they probably have gone for the sake of plunder ; be therefore on your guard, but draw no positive conclusions from their appearance.

If repeated Russian and Prussian patrols take the same road for several days together, and especially if their armies have been in position for some time, it is an indication of a movement towards the quarter reconnoitred.

If the English cavalry knew the art of war, it would probably in action be the most formidable in Europe ; its well judged lavishness in the breed of horses and equipments harmonizes with the courage and personal appearance of the men ; whenever it shews itself you may rely upon it that its movements are combined, that its onset will be fierce, and its retreat regularly conducted. It seldom acts apart from its infantry, which ensures it rest in its bivouacs. It knows its position and learns the disposition of the enemy better by spies, whom it pays liberally, than by the reconnoissances, which it makes.

If you should learn that it is separated from its infantry, do not hesitate to surprise it by night ; when it charges you, make one rapid change of front, and take it in flank. You will always successfully execute this manœuvre against every cavalry whatever, which, like it, makes a vigorous and headlong charge, whose horses are but little under control, and whose troopers have more bravery than strategy, so that they push their charges to too great a distance.

If the Cossacks scatter in their retreat in proportion to your attacks being more prolonged, do not in consequence be induced

to suppose that they have lost all confidence and courage; it is their method of retreating, a method very dangerous for a pursuing enemy, who very often has occasion to repent of his temerity.

If, on the other hand, other European troops do not quickly rally, whilst retreating, it is a proof of disorganisation. They must then be pressed vigorously.

Q. If you have charged and passed through northern infantry, does this place it at your mercy?

A. The Austrian infantry throws down its arms, and each soldier resumes his appellation of Pole: he will follow you with enthusiasm.

The Prussian infantry throws down its arms, but picks them up again as promptly, if it perceive that assistance is coming to it.

The Russian infantry throws itself upon the ground, allows the charge to pass over it, rises, and uses its arms afresh.

The Austrian sharp shooters, clothed in grey, and armed with rifle carbines, are lost, if you close upon them in a plain: you must not then hesitate to charge them; they are at your mercy, for they have not sufficient time to reload.

We can only approach the truth in the approximative calculations which we make of the strength of the enemy by the number of fires in his bivouac, by knowing beforehand that each fire indicates a greater or smaller number of men, according to the nation to which the bivouacked regiments belong. This difference depends especially upon a very distinct national character, and also upon the description of cooking utensils with which the troops are provided.

In the same manner that a French bivouac fire indicates a medium of ten men, a Russian one indicates one of four, a Dutch one, one of five, an English one, one of six, an Austrian one, one of six, and a German one, the same.

It must be perfectly understood that these calculations are only approximations, and that the briskness of the fire, pointing out the greater or the less number of men to be cooked for, is the best criterion.

CHAPTER X.

OF GUIDES.

Q. When is it necessary to take guides?

A. On every occasion, when you are not thoroughly acquainted with the country in which your operations are being carried on, and especially if it be possible to have them mounted, so as not to be compelled to suit the rapidity of your march to the pace of a man on foot.

Q. Ought you to change the guide?

A. When the guide knows the country well, you must keep him all the time that the expedition lasts, especially if it be of a delicate nature.

Q. Suppose that in a delicate expedition, your guide, having come from a distance, finds himself in a country of which he is ignorant, what is to be done?

A. Take another, but always carry the first along with you, whom you will not release till after the termination of the expedition, in order that he may not have it in his power to betray the secret of your march.

Q. What precautions do you take with a guide?

A. The strictness of the precautions to be taken with a guide depends entirely more or less upon the importance and danger of our expedition. The guide, who shows the way, either in peace or war, in rear of the line of operations, ought to march at liberty and at the head of the column.

Q. And the guide, who leads a reconnoissance?

A. He ought to march close to the officer in command, and under the special charge of a non-commissioned officer or corporal, who will keep his eyes constantly upon him. We must never forget that, in an enemy's country especially, a guide will always endeavor to make his escape, if he can do it easily and without danger.

Q. If the guide be on foot, how do you act?

A. You tie a long leather thong to his left arm, the other end of which is attached to the saddle bow of the corporal ; the non-commissioned officer, with his sword drawn, and holster pipes uncovered, marches alongside of him.

Q. *If the guide be mounted, how do you proceed ?*

A. You fasten one of his legs to his stirrup leather, to prevent his taking advantage of a difficult road, leaping down, and escaping ; then you put his horse's reins into the hands of the corporal on his left hand, who leads him in this manner, so long as the expedition lasts.

Q. *If suddenly you perceive strange emotions passing over the countenance of the guide, what should you do ?*

A. Warn him that, if he betray you, he shall be pistolled on the spot.

Q. *And, if you apprehend that he is leading you into an ambuscade ?*

A. You will point out to him that, as he is marching at the head of the column, in the event of the enemy opening his fire upon the detachment, he will be the first sacrifice.

Q. *Why do you employ two men in taking care of a guide already so strictly watched ?*

A. Because the ground is often difficult, and, if you are compelled to march in single file, it is indispensable that he should be both preceded and followed.

Q. *Would you allow the guide to follow a footpath, which runs parallel to the route pursued by the column ?*

A. As a general rule, it is requisite that the guide should march over the same ground as the column, especially if the country be broken, the road flanked by woods, deep ditches, ravines, &c.

Q. *Would you entrust the custody of the guides to the first non-commissioned officer, or corporal, of your detachment that might be at hand ?*

A. No, but to the most intelligent, because he ought always to be able to read the guide's countenance.

Q. *Would you allow him to chat with the guide ?*

A. No. You must positively prohibit his either asking, or answering, questions that may be addressed to him ; since you have selected individuals to converse with him, and these men

you have picked out from amongst those who are best acquainted with the language of the country, and whom you suppose to be the most discreet.

Q. In a delicate expedition, would you interrogate the guide in front of your detachment?

A. No, I examine him privately.

Q. How would you put questions to a guide?

A. Very slowly, and fixing his attention : if he does not comprehend a question, you must patiently put it in another shape, so as ultimately to obtain a pertinent answer.

Q. How do you treat a guide?

A. Very gently ; you must let him want for nothing, and, if after your return, you have reason to be satisfied with him, and can render him a service, or give him a pecuniary reward, you should not omit doing so.

Often, in an enemy's country, the peasants, in order to evade being made to serve as guides, will declare that they do not know the country. Do not be duped by this falsehood, frighten and carry along with you these pretended ignoramuses, until you have procured more useful guides.

CHAPTER XI.

OF SPIES. — OF CONFIDENTIAL MESSENGERS.

Q. Does an officer of the advance guard employ spies?

A. Yes, but unfortunately too seldom, because he has not sufficient money to pay them properly, and because, in an enemy's country especially, it is more than probable that a spy, poorly paid, will become a spy upon yourself. All his interests will combine to cause him to act thus.

Q. By what then ought we to regulate the employment of spies, and the degree of confidence to be placed in them?

A. By the country in which we happen to be, by the interest which the inhabitants have in serving you; by the opinion which those inhabitants have of your strength.

You require moreover to exercise a great deal of care and consummate skill with reference to the mode of employing these spies; otherwise you may have reason to apprehend that your secret designs will be revealed to the enemy. You must, so to speak, when you are in a precarious position, await the return of a spy with the same precautions which you use with reference to a reconnoissance, for he may be accompanied by the enemy, and expose you to an attack so much the more dangerous, as it will be conducted under more correct and certain intelligence.

Q. You must not then engage the first individual, who offers himself, for an undertaking of this nature?

A. No. You must first endeavor to ascertain his connexions and places of resort, and by them to judge of his integrity, the relation in which he may stand with reference to the enemy; then endeavor to seduce him by interesting him on your side by good treatment, flourishes of rhetoric, holding out hopes to him, and impressing him with the conviction of the certain success of our army.

It is necessary, also, (without threatening him, however,) to impress him with the idea that, if he betray you, you have it in your power to take your revenge upon his family, his property, &c.

Q. Ought you at first to make a trial of a spy in small matters, which are neither very important or very dangerous ?

A. Yes : and, when he returns, we should be very exact in fulfilling to the letter and readily the engagements into which we have entered with him.

When we have proved him to be intelligent and faithful in missions which are not particularly dangerous, we entrust him with important ones.

Q. When you require to obtain various pieces of intelligence regarding the enemy, do you entrust them all to the same spy ?

A. It is necessary first of all to estimate the degree of intelligence possessed by the man to whom you entrust a commission. If that intelligence be limited, you must contract the business committed to him. Again, it is dangerous to place your entire secret in the hands of one person. It is much better, in every point of view, to employ several spies, whom you despatch at different hours, sending them in different directions, and so providing that they shall have no communication with each other.

Q. If you should have reason to distrust one of them, ought you to make a prisoner of him ?

A. By no means ; it is far better to employ him on a fictitious errand, which will induce him to suspect that numerous reinforcements are moving up to a certain point, threatening the enemy, and that a strategical manœuvre is about to be put in practice, which will compromise the safety of the enemy in the position that he occupies.

Q. Do you give a spy written instructions ?

A. In the case of a fictitious errand, yes, certainly ; and, in this case, you will conceive them in such terms, that they will carry out your projects by their falling into the hands of the enemy.

Q. And with regard to a true commission ?

A. Never ; the instructions ought always to be verbal.

Q. Give me examples of both cases ?

A. The enemy's line, drawn up in front of you, occupies the villages of Valtersdörf, Thaldorf, Meissen, Langsdorf, Baumdorf, Grossdorf, and Kleindorf.

Some leagues in rear of the line and on the left is the town of Guttstadt; you give to the spy, whom you suspect, the following written instructions:

"Pass the enemy's line. Make for Guttstadt, and ascertain whether any French hussars with red pelisses of No. 4 regiment, chasseurs with yellow jackets of No. 2 regiment, dragoons with red jackets of No. 2 regiment, red lancers of No. 4 regiment and any infantry, have not come up."

"If they have not yet made their appearance, reconnoitre the condition of the roads from Guttstadt to Grossdorf, as to whether they are passable for artillery. Return to Guttstadt, there to await the arrival of our division, and return with all speed to give us notice of its approach."

To the spy, in whom you think that you can place confidence, supposing that you are projecting an attack upon Meissen, you give verbal instructions to reconnoitre the villages of Baunidorf, Langsdorf, and Meissen.

These instructions contain all that you wish to know. If you are afraid that he will not readily retain the names of these three villages in his memory, you will make him write them upon a small scrap of paper, which he can easily swallow, if he incur the risk of being taken. Admitting that the man be captured, or betray you, the enemy, seeing three names written on the paper, will not know on which of the three villages the attack will be directed, or whether the whole three be not threatened.

Q. From amongst what description of men would you select your spies?

A. As much as possible from amongst those whom the enemy would have least reason to suspect, thus, post masters,* postillions, the drivers of public conveyances, shop-keepers, who are known in the country, may turn out to be very useful, because these are naturally less open to suspicion than men, who, in the event of their being taken prisoners, will be incapable of satisfactorily accounting for their being in that neighborhood, and procuring people to answer for them.

Q. How would you recognize a spy, sent by the enemy to observe you?

* This term is to be taken as meaning masters of stages for posting horses.
—TRANSLATOR.

A. By their way of looking about. By the attention which they pay to every thing going on in your bivouac. By the frivolous pretexts, which they allege for wandering through it. By the agitation which they display, if you seize them. By the vagueness of their answers to your interrogatories, and especially if they conceive that you recognize them. Often by the money which they have the folly to carry about their person. By the anxiety which they shew to destroy any document in their possession.

Q. In Germany, what description of men would you select for this employment ?

A. Poor Jews.

Q. What pretext for entering bivouacs would they allege ?

A. That of trading. They often request to be allowed to purchase the skins of the animals slain for the consumption of the soldiers. This was their excuse for entering our bivouacs, at the period of breaking down the bridges over the Danube on the day of the battle of Essling.

Q. When the slightest suspicion of these spies arises, what ought you to do ?

A. To arrest the suspicious individual forthwith, subject him to severe cross-examination, so as to observe whether he contradicts himself in his answers, and send him under a strong escort to the commandant of the advance guard, with a report containing an account of the examination and your own opinion.

Q. When the detachments of your army being separated considerably from each other, it is necessary that they should interchange communication, and they are unable to do this by the ordinary methods, except by losing precious time, and thus compromising the usefulness of the communication, what steps should be taken ?

A. The mission is entrusted to a confidential messenger, but the business is so much the more delicate and dangerous, in proportion as the details imparted to him are more confidential and important. For this reason, it would be very useful, when a corps is detached, and we conceive it likely that we shall be placed under the necessity of corresponding with it by a secret messenger, to agree beforehand with its commander upon a cypher, the duplicate of which we preserve with the greatest care.

Q. Cannot all cyphers be made out ?

A. Yes: as far as diplomacy and cabinets are concerned, but not with reference to an officer commanding an advance guard, or an army either. Moreover, there is one that can easily be employed, and that cannot be decyphered.

Q. *What is it?*

A. You and the person, with whom you correspond, should each possess a similar volume. This volume may belong to any work, and may be written in any language, provided that you are acquainted with the alphabet of it.

The first cypher, which enters into your correspondence, is that of the page selected; the second, that of the line with which you commence. The others, those of the letters, which you employ, and all which you have numbered without any *hiatus*, setting out from the first mentioned, until you have those that you require. Unless a person has the same volume as yourself, it is totally impossible to make out your cypher, because the same letters repeated are represented by different cyphers. We must take care to leave no intervals between the cyphered words, in order to prevent a comparison of the different words by the number of letters that each contains, and thereby allowing an inference to be drawn.

Q. *Do we not sometimes employ pretended confidential messengers?*

A. Yes; but the case is of very rare occurrence; because there is required a very great devotion to the cause on the part of those who undertake to play this ticklish game, and put the enemy in possession of false written information, that may induce him to take an important determination, which may blast his hopes. If, however, a case of magnitude arises, this stratagem may be employed; but we must select a messenger, full of courage, resolution, and finesse.

Q. *What instructions would you give to your soldiers in cases, where you suspect espionage?*

A. You should forbid their becoming too intimate with the inhabitants: warn them to distrust their questions, and never to reply to them when they bear upon or may throw light upon our position. You should also order them to arrest the persons, who would induce them to drink, and then put questions to them afterwards.

CHAPTER XII.

OF THE QUESTIONS TO BE PUT.

We cannot be too careful as to the kind of questions which we put, because in certain cases, the answers which they elicit decide us to take an important step.

To be thoroughly acquainted with every thing, to distinguish truth from falsehood, that which is important from that which is useless, is a talent in war, and one of the most precious gifts that an officer commanding an advance guard can possess.

Q. What ought to be your chief care, when pursuing a course of interrogations ?

A. To estimate aright the moral disposition of the person whom you are interrogating.

Q. In what does the necessity of this scrutiny exist ?

A. In its deciding the nature, the form, and the tone, in which the questions are put.

Q. Is there nothing further to ascertain ?

A. Yes : the greater or less degree of intelligence possessed by the questioned party : the knowledge of this will assist us in framing our questions, and deciding as to their being important or otherwise.

Q. Of course, you modify your method of interrogating, agreeably to the nature of the country in which you are ?

A. Yes ; in general, it is better always to commence your interrogations mildly, but in such a manner as to inspire the conviction that it is impossible to deceive us. It is needless to say that if the war is carried on in our own country, we should not put our questions as if we were in an enemy's country ; or that, if it be in an enemy's country, there are nevertheless distinctions to be drawn between such and such countries, and such and such classes of individuals ; who are more or less inclined to be hostile or favorable to us. We must bear in mind, in putting our questions, that every thing that we have enquired or said will be repeated, and must reflect upon the advantageous or unfavorable

effect upon our cause that such may have. Often a question unskilfully put has produced a result exactly opposite to that which we expected : an interrogator has often found himself placed in the witness box, without he himself suspecting it, and his questions have proved fatal to him because, having been repeated to the enemy by the party interrogated, they have served to acquaint him with his plans, and enabled him to defeat them.

Q. Who is the first person to be interrogated on your arrival at a village?

A. The mayor, or whosoever administers the municipal functions ; the postmaster, the curate, or minister, the schoolmaster, the lord of the manor, the men who have been pointed out as having acted as guides to the enemy.

Q. What is, as near as possible, the series of questions which you put to them ?

A. The questions, always proportioned to the intelligence of the individuals to whom they are put, are ; Where is the enemy ? What do you know concerning his march ; his military dispositions ; his numerical strength ; the *morale* of his army ? Has he infantry, cavalry, artillery ? Are his horses out of condition, his men knocked up ? What language do these men speak ? Whence is it said that they come ? Do they belong to the militia or the line ? Has he many men amongst his troops who speak French ? (English.) Does the enemy bivouac or quarter himself on the houses ? What precautions does he take ? Does he send out patrols ? Have those patrols been pushed as far as the village where we are ? How did they shew themselves ? Were these patrols numerous ? What did they do here ? What did they say ? Did they plunder ? Did they insult the inhabitants ? How were the men who composed the party dressed ? What enquiries did they make ? From what quarter did they come, and in what direction did they leave ? Where did they proceed to on quitting the village ? Did they pass the night here, and how did they establish themselves ? Is the enemy close at hand, and does he send out reconnoitring parties regularly ? Do they arrive at the same hour every day, in the same strength, and by the same road ? What state is the road in, leading to the enemy ? Are there woods, ravines, bridges, villages, there ? Where are they situated ? Can we reach these defiles by fetching a compass, and without crossing

the road held by the enemy? Is he on the alert? How does he post his sentries? Has the enemy seized any horses from the postmasters? Has he made use of their postillions, or of any of the villagers as guides? In what direction did he make them take him? What questions did he put to them? Did he ill-treat them? Did the guides observe him to be anxious and disturbed? What precautions did he take on his march?

Q. Are there no other questions to be put?

A. Yes: and which, according to the position in which we may be placed, the orders which we have received, ought often to precede, or even be substituted for, those which have just been pointed out.

Q. What are they?

A. All those, which relate to the topographical configuration of the country that we are traversing. Thus, whereabouts is such a city, town, or village? What is their population, what their resources? What distance do they lie from each other and from the place where we are? Are the roads leading thither, good, macadamized, paved? Are there intermediate villages, hamlets, farms? Are they wealthy? How many houses are there? In order to get there, must we cross woods, plains, or rivers? Are there fords or bridges? What is their nature? Can we mistake the road? Which one ought we to take? Are there mountains? What is the nature of the roads leading up them?

Q. Ought we to interrogate the individuals whom we summon, separately, or together?

A. Separately, and to pay great attention in comparing their answers: if we perceive that there is a great want of agreement between them, we should fathom them carefully and skilfully; and, if we have any suspicion excited as to their incorrectness, we should arrest those who have thus replied, and carry them along with us strongly guarded.

Q. Ought the series of questions, in such and such circumstances, which are apparently the same, to be unvaried?

A. It will vary according to our position and the nature of the orders, which we have received. One is often obliged, in order to arrive at a correct knowledge of facts, to assume false colors, thereby to ascertain the truth: often too a daring partizan, who does not wish his nationality to be recognised, is obliged to

adopt the language of the enemy, in whose rear he may happen to be, and to interrogate the inhabitants, as if he belonged to a Prussian, Russian, Austrian, &c. corps. In this case we do not put any of our people in communication with those interrogated, except such as speak the language of the country perfectly, and we strictly forbid all others to converse with them. It depends upon the greater or less degree of intelligence possessed by the questioner to judge of the form, the nature, the severity, or the mildness, of the questions which he puts: the important point is to arrive at the knowledge of the truth.

Q. What questions do you put to a deserter ?

A. I ask him : I. The number or the name of his regiment, its force ; II. The brigade to which he belongs ; the name of the general, who commands it ; III. Of what division does this brigade form part ; the name of the person commanding this division ; IV. To what *corps d'armée* does this division belong ; the name, the rank of the general who commands it ; the situation of his head quarters ; V. If the regiment, the brigade, or the division is cantoned, encamped, or bivouacked ; If ~~a~~ corps is in position, I would ask, if he is covered by many advance posts, whether a bright look out is kept, and lastly whether it is entrenched ; VI. What *corps d'armée*, or divisions, are to their right or left, and how far they are off ; VII. Where did he leave his regiment or his brigade ; whether this corps has furnished detachments ; whether it expects reinforcements ; VIII. Whether there were any orders issued relative to a contemplated movement, or any of those preparations which denote an advance ; IX. What was the nature of the orders of the last day ; X. What reports were current in the army ; XI. Whether provisions were abundant, and what is the position of the magazines, depots, and entrepôts ; XII. Whether there were many sick, and the situation of the grand and field hospitals.

Q. Should the deserter arrive, whilst his corps is on the march, what additional questions would you put ?

A. I. What direction is the column taking ? II. Is its movement independent or combined ? III. To what point has the column received instructions to advance ? IV. Does the column consist of only one and the same description of arm, or of all in proportion ?

Q. If the deserter belongs to the cavalry ?

A. You pursue your interrogations after this fashion: How many horses have you in your regiment? How many had you at the commencement of the campaign? Are they in good condition? Have you many re-mounts? Have you many recruits or young soldiers? (L. R. A.)

Q. *Why these two last questions?*

A. Because as light troops ought not to allow any opportunity to escape them of inflicting injury on the enemy, we should not neglect to attack a corps of cavalry, in which there might be many recruits or remounts?

Q. *Go on?*

A. Are there many horses sick, or unfit for service? Is forage abundant? Does the country occupied suffice to supply them? Or do they rather draw it from the rear of their army? (L. R. A.) Does it reach them punctually? Do they send out detachments to procure them? Must they go far for them? Where are the magazines? How are they protected? Are the troopers ill-used by their officers? Are there any disturbances in the regiments? If we were to meet with success, would there be many desertions? What precautions are taken against desertion? Are the hospitals at a distance from the army? Did they lose many men in the last affair? Have these losses disheartened the men?

Q. *What questions would you put to an artillery man?*

A. The preceding ones, and in addition: Where is the principal park? Are there any siege guns? Where are the depots? Where is the small park? Has the division, to which his battery is attached, any pieces? What calibre and what description of guns? Are the waggons and limbers complete with ammunition (L. R. A.)? What is the number of the regiment, company, battery? Is there a pontoon establishment? Are the draught horses in good condition?

Q. *What questions would you put to a soldier of engineers?*

A. The preceding ones, and further: Where is the grand engineer park? Have the sappers attached to the divisions waggons with their tools, a bridge establishment, frame work, or other materials for bridges (L. R. A.)?

Q. *What questions would you put to a prisoner?*

A. The same as to a deserter.

Q. Are you to expect that the reports which you obtain will always be correct?

A. No. Some, from ignorance, will not be able to reply categorically ; others, from cunning, or a desire to make themselves of importance, will make a point of answering just as you would wish them to do, or else will not speak the truth ; but, in order to put them at fault, you will repeat the same questions suddenly and at different times, in order to compare the last answers with their previous statements. (L. R. A.)

Q. Should you transmit to the general of the advance guard a detailed report of these interrogatories ?

A. Yes : adding thereto your own remarks as to the degree of credibility which appears to attach to the deserter or prisoner ? (L. R. A.)

Q. Why ?

A. Because, as it is probable that the general has obtained by his spies certain intelligence of the different detachments of the enemy's army, his own information compared with these reports will enable him, if not to gather the whole truth, at least to draw deductions sufficient to guess at the probable movements of the enemy, and to give fresh instructions to his spies. (L. R. A.)

Q. If you are en route, would you halt, in order to pursue these interrogatories ?

A. Yes ; if you have time to do so, without interfering with the execution of the orders which you have received ; if you have not, after having put to the prisoner, or deserter, those questions, the answers to which will afford you information on the points connected with your own course, you will commit the deserter, the prisoner, the inhabitant, &c. to a trusty person, who will conduct him to the officer commanding the advance guard, to whom he will communicate those matters, regarding which it has been impossible for you to question him in a minute manner.

Q. Upon what would you write your questions ?

A. It is indispensable that an officer, or non-commissioned officer of an advance guard should always carry about him paper, pencils, and wafers.

Q. What would you ask of travellers ?

A. I. Their name and their passport.

II. Whence they come, and whither they are going.

III. Whether they have met troops on the march, their description, and their number as near as possible. As to the strength of this column, we may be able to estimate it ourselves more exactly, by asking of the travellers, how long they thought they were in passing this column.

IV. What may be the strength of the bodies of the enemy according to report in the places they have passed or stopped at.

V. Whether these troops were in good order, whether they had sick with them; whether they were expecting recruits.

VI. Whether the villages, which they have passed through on their road, were filled with troops.

VII. Whether the enemy's advance posts are properly connected; whether in rear of the furthest advanced chain there are infantry and artillery to support it and to reinforce it; lastly, the distance, as near as possible between these different supports, and the chain of advance posts.

VIII. In what state are the roads and the bridges: whether the enemy is busy repairing them: whether he is engaged in fortifying, or has already fortified, any of the places through which they have passed.

IX. If provisions and rations are scarce and dear in the countries occupied by the enemy: if the country is suffering; if it has preserved its cattle, or if the enemy has seized upon them.

X. Lastly, what are the public reports contained in the enemy's newspapers; what is the date of the last paper that they have seen, and what was said in this last paper. (L. R. A.)

Q. Do you always write down the questions that you put?

A. Generally: but nevertheless there are cases, when this should not be done. That, for instance, when occupation of this nature would cause you to lose time, which would be much better employed in marching. That, in which the answers received do not appear of sufficient importance. That, in which you conceive that you can obtain information better in the shape of a simple conversation; but then, if this conversation should yield the results which you anticipated, you should retire, and commit it as faithfully as possible to paper. In this case, as in that in which you write down your questions in the presence of the party interrogated, you must wafer what you have written, and send it along with the traveller, the deserter, the prisoner, the inhabitant,

and a non-commissioned officer, to the officer commanding the advance guard. In the case, wherein you have written down nothing, you must still send to the commandant the individual whose examination has appeared to you interesting, and you will select for his escort an intelligent and discreet non-commissioned officer, whom you will direct to tell to the general that which you have not committed to writing.

Q. What do these interrogatories require ? .

A. Great care, for they often conduce to the discovery of spies.

CHAPTER XIII.

OF BIVOUACS.

I have said, in the Chapter on Charges (Chapter XXIII), that the seizing of the proper moment (*l'apropos*), is the genius of war. I repeat it in this.

The *l'apropos* for sleeping is as difficult to seize as that for attacking.

The machinery of war is limited to two things, fighting and sleeping; the using and repairing of your strength. To maintain the indispensable equilibrium between these two is science.

If often requires more ability to impart strength to your men than to expend it.

In presence of the enemy, the science of repose is a gift, enjoyed by but few officers. Nothing more declares the sure, the prompt, the skilful, the perfect military *coup d'œil*.

The determination of the site of your bivouac is taking up a military position. To sleep well in it, and then to find yourself in the saddle completely rested and refreshed, ready for any undertaking, when the enemy is approaching to the attack, this is thoroughly knowing your adversary, it is the having of him by heart. To oppose troops that have been refreshed to soldiers worn down by privations and fatigue, this is to take your enemy from your strongest to his weakest point (*du fort au faible*); this is to turn all the chances of the action in your favor. If to this talent, the fruit of an innate disposition, and of unfailing experience, you unite the ardor which leads you on to enterprise, and to pushing your success, you are an officer of advance guards of the very first order.

Q. *What is the first condition of excellence in a bivouac of an advance guard?*

A. Its military position. Its difficulty of approach by the enemy. Its facilities for our own sorties.

Q. *What is the second?*

A. Its suitable site for our *materiel*. The abundance of its supplies.

Q. ; Do you always find, on active service, these two essential conditions combined; and, when the contrary is the case, do you delay in establishing your bivouac until you have found them so united?

A. The requirements of the advance guard are almost always of a marked character: I calculate them coolly, and, not being able to satisfy them completely, I make a selection. If there be a more urgent necessity for posting myself than to sleep, I post myself. If, on the other hand, it be of greater consequence for me to rest than to take post, I rest my men accordingly. But, in this case, I endeavor to masque my bivouac, and I make amends as far as possible for the defective natural defence of my position, by pushing out my videttes to a considerable distance.

Q. How do you select a bivouac with reference to subsistence ?

A. If I saw a village, I would establish myself close to it, because I might rely upon finding within it supplies of provisions and forage; upon there being no deficiency of water for my horses; and upon a reasonable expectation of shelter, in case of bad weather.

Q. But suppose that there was no village ?

A. After having, as in the first case, brought my requirements down to the level of what the exigencies of the service will admit of, I would endeavor to gain the vicinity of a brook, which would afford me the necessary supply of water; that of a meadow, and corn, or oatfield, which would furnish me with forage for my horses; of an enclosure, which would give me a convenient and regular paddock for them; of a potatoe field, which would ensure provision for my men; of a wood which would supply me with pickets, shade, branches, and leaves, to construct and cover in huts, and furnish fuel.

Q. Is there any other essential condition yet remaining ?

A. Yes; that the ground be hard, and consequently wholesome; that the banks of the rivulet be not dangerous, so that we may not incur the risk of losing any horses, when they are being taken to water.

Q. When you have selected your ground, what do you do ?

A. I first form in order of battle facing the enemy, and in the order in which I wish the squadrons to take up their ground; then setting out in person with the mounted detail for duty, I

leave orders with the officer who succeeds me in command of the regiment, or the detachment, to make the men dismount and proceed for forage, as soon as he shall perceive that the main guard has halted upon the ground, which it is intended to occupy.

This signal given, the troopers dismount, unbridle, and fasten their horses, without any intermingling, by squadrons, by divisions, by squads.

Q. Wherefore?

A. Because in war, centralization constitutes order, and order constitutes strength.

Q. After the horses have been fastened by their tethering reins, what do you do?

A. Their bridles are placed in their rear, folded up in such a manner that they can be readily undone and slipped on the horses' heads; and hung up, if possible, on the boughs of the trees or on pickets, in order to guard against their being trampled in the dirt, or being mislaid among the forage: in order, in short, that we may not be obliged to make a long search for them when they are required. This duty completed, half of the chasseurs, after having hung their appointments on the brambles which support their bridles, take their sickles and hatchets, and start to procure forage, if the inhabitants have not complied with the requisition made on them. (See the Chapter on Provisions and Forage.)

The other half lay aside their arms, and complete the arrangement of the bivouac. They take the firearms from off the horses, and pile them near the bridles and accoutrements, putting them under cover, if it rain.

Q. Why do you remove the firearms from off the horses?

A. Because, if the horses should happen to roll themselves, they would break and lose them.

This being done, one man remains in rear of the horses, to prevent them fighting, which would injure themselves; and their rolling, which would bruise the saddles; the rest run up a field barrack, and, if wood be at hand, light fires in front of it.

Q. What is the first condition required in the construction of a field barrack?

A. That it should be open to the side on which the horses are, so that the men may always have their eye upon them.

Q. And the second?

A. That it should afford shelter on the weather side.

Q. And the third?

A. That it should be to windward, and not to leeward, of the fires, to avoid the danger of its being burned down.

Q. This pent barrack having been run up, what do you do next?

A. I make the men lie on the ground, and support with piekets a plank, or a piece of wood, on the exterior face of the barracks, to keep the straw, composing the men's bedding, inside, to prevent the fire communicating to this straw, and setting fire to the barracks.

Q. This having been done, what precautions do you take?

A. I place in the barracks, hung at each man's head, his accoutrements, his arms, his bridle, and his haversack.

Q. Why do you put the arms, the accoutrements, and the bridles there?

A. To preserve them from rain and accidents, to keep them within the men's reach.

Q. How do you light the fire?

A. I strike the flint and steel, light the tinder, which I put in a loose roll of paper: I wrap this paper up in a handful of straw, and by a waving movement, like that of a man beating up a salad, I raise a flame which ignites the paper and the straw.

Q. After the fires have been lighted, what you do?

A. I go to the water with the cans, and put the kettle on the fire.

If the kettle be a tin one, I must fill it completely, otherwise the solder will run.

Q. After the faragers have returned, what do you do?

A. The forage and the victuals are common property, the latter being cooked together, and both put in lots. The forage is served out to the horses in small quantities, to prevent their spoiling it; the provisions are put into the pot. The various duties are distributed amongst the squad. One looks after the horses; one feeds them; another wisps them down; another takes care of the soup; another cleans the vegetables; another looks out that the fires do not threaten the barrack in their

vicinity; another goes back for fuel; another for forage; another makes repairs which are urgently required in the equipments, the arms, or the clothing; another brushes up a soiled arm; all are actively employed. (*Ont l'oreille à la trompette*).

The duties having been detailed, provisions served out, the soup in preparation and the horses cooled, the order is given for the horse to be led to water in succession by divisions or squadrons. On their return from the watering place, the men unloose the girths, and adjust the saddle cloths and saddles on the horses' backs. That done, you do not keep up more men than are absolutely requisite to watch the horses, supply them with provender, and look after the kettle: the rest go to sleep in their cloaks.

As soon as the soup is ready, the squad is aroused in order to eat it as well as the meat; what remains of the latter is carefully stowed away in the men's haversacks.

If, when day break arrives, the trumpet does not sound to horse, the horses are led away to water, the saddlery is inspected, the necessary repairs are made; the horses are rubbed down without being unsaddled, and the saddles are re-adjusted on their backs. The stock of forage is renewed, fresh soup is put on the fire, and the men go to sleep again, if they can.

In campaigning, you must eat and sleep as often as you have an opportunity.

Q. But suppose that you can't sleep?

A. That makes no difference: you must try to do so.

Q. What do you do if you have no bread to put into the soup?

A. If you have flour, make cakes or doughnuts of it, and put them into the soup; and if you have grain only, bruise it between a couple of stones, and make cakes of it.

Q. Suppose that you have no pots to cook your soup in?

A. Grill your meat, by sticking pieces of it on the point of a stick. (See the Chapter on Arms.)

Q. What is the strength of the guard of the bivouac?

A. That depends upon the strength of the force bivouacked. It ought never to be under four men, a trumpeter, and a non-commissioned officer.

Q. Where is it planted?

A. In the centre of the bivouac, close to the quarters of the colonel or commandant.

Q. How is it employed ?

A. It furnishes a sentry at the entry of the bivouac, on the side on which the main guard is posted.

When the regiment is all together, it consists of ten men, and furnishes a sentry at the entry of the bivouac, and another, who guards both the arms and colonel.

A captain has charge of the police.

Q. What is the duty of this guard ?

A. The safe custody of men under punishment, the carrying into effect the orders of the police which are issued by its head, the being vigilantly alert all night, the paying attention to all noises which may be heard, especially in the direction of the enemy, and to alarm the colonel forthwith, if there be good cause for doing so. The trumpeter on duty is the one to sound the alarm.

Q. This guard is dismounted, where are their horses placed ?

A. Their horses remain with their divisions, where they are looked after.

Q. What precautions do you take for feeding your horses ?

A. You will find this in the Chapter upon Provisions and Forage.

Q. What is the most convenient number of men for a fire, and a hut or field barrack ?

A. From eight to ten; because a single kettle is enough to cook for them, and because each description of duty has a sufficient number of men for it. Let men ever bear well in mind that in bivouacking reciprocity of service, and an equal division of fatigue, are rigorously calculated and estimated, and that a man will never obtain from his comrade more assistance than he has rendered him.

Q. How do the officers live in a bivouac ?

A. Amongst themselves by squadrons, if the regiment be together: if they are detached, they share the kettle of the soldiers, but, in this case, they should throw their provisions and something additional into the pot, which they assist in making a hole in.

Q. Who runs up the officers' huts ?

A. The officers, themselves, assisted by the men who will be advantaged by them.

Q. *Who puts their traps in order?*

A. Themselves, or their servants.

An officer's orderly is not required to do more than rub his horse down, and feed it. If he does more, it is out of civility.

Q. *What is the duty of an officer or a non-commissioned officer in a bivouac?*

A. If he be not ordered on a special service, which removes him from his squadron or division, he ought to sleep less than the men under his orders; he should observe whether the horses eat and drink, are properly secured, and do not fight; that the supply of forage is ample for the night; that the saddlery, which has been damaged, is repaired; that the saddles are re-adjusted on the horses' backs; that the men's kits are re-packed, if they have been badly put up; that the arms are under cover; that the men do not quit the bivouac without good reason; that they do not get drunk; that they do not ill-use their horses; that they have their effects collected in such a manner as to enable them to mount readily at the first sound of the trumpet; that the old hands do not annoy the young ones; that no quarrelling takes place; that the orders of the officer in command are promptly and punctually executed; that the foragers bring nothing into the bivouac but what is useful and absolutely required for its establishment, and for feeding the men and horses.

If the trumpet sounds to horse, the officers and non-commissioned officers ought to be the first on the ground where their squadron assembles, which is that where they dismounted. There, they attend to the call of the roll, and satisfy themselves whether each man really answers to his name. Then they rapidly pass over the bivouac just quitted; in order to ascertain that nothing belonging to the men's kits has been left behind: if they find any articles, they cause them to be taken to the men who have forgotten them.

Sometimes, a body of troops, on quitting its bivouac, sets fire to it; this is wrong, because the abandoned bivouac might serve for other troops; because the fire, spreading in the neighbourhood, might occasion immense and desolating havoc; and because these bivouacs might, under every circumstance, be useful to the poor peasants, who are already ruined by the war.

It may happen that it will be politic to burn down a bivouac; but the orders of the commanding officer to do so should be previously received.

If the bivouac be quitted before the soup is ready, the kettles should be upset, but we must not forget to carry away the victuals and the different vessels.

When several detachments of different regiments occupy the same bivouac, it is indispensable that the trumpeters of each of these detachments should have a distinguishing call prefixed to the trumpet sounds: if this precaution be not taken, the separate movements of each detachment ought to be regulated by word of command, and not by trumpet sounds.

Q. Then it sometimes happens that in a bivouac the orders are issued without having recourse to trumpet calls?

A. Yes: every time especially that we desire to conceal the movements that we contemplate, or execute: in this case, the orders of the colonel are conveyed by an adjutant to the superior officers, who, in their turn, transmit them to the captains, and so on downwards.

CHAPTER XIV.

ON FORAGE AND RATIONS.

I have made eight campaigns under the empire, and always with the advance posts: during the whole of that time I did not see a single commissariat officer; I did not draw a single ration from the magazines of the army.

Q. There was then no military commissariat?

A. The commissariat was never placed in the hands of men of greater experience and integrity than at that period: it is enough to mention the names of Messieurs Dara, Daure, Dufour, Volland, and several others.

Q. Then why had this commissariat no subordinates with the advance posts of light cavalry?

A. Because the emperor considered the scheme impracticable. It would have been folly to have subjected a body, irregular in all its movements, to regular distributions of rations; especially at a period so crowded with victories, when our armies carried on war at gigantic strides, and when our light cavalry had scarcely reached their bivouacs 'ere they were summoned to leave them.

Q. But at that time you were in an enemy's country?

A. Yes: at first we had the good fortune to throw the whole burthen of the war upon the enemy; but, fortune changing, we were obliged to throw ourselves upon the resources of our allies and our own. Then, as before, the light cavalry subsisted itself on the spot where it might happen to be, and bonuses were given to ensure regularity of supplies. Then, also, as before, the cavalry was careful, not to take more than it required, and not to impoverish, in sheer wantonness, an unhappy country, and thereby to diminish the resources of our companions in arms.

In peace, *wastefulness is an injustice*, in war, *it is a crime*.

c. If regular issues are made, so much the better; endeavor then to have provisions of a good quality, and of proper weight: for five and twenty years I have invariably seen the contractors gain unconscionably both by the weight and the quality of their

supplies, replying to the reproaches heaped upon them, "It has been such a bad year!" If rations are not served out, live;* and let the discipline which you maintain be directed solely against wastefulness.

It is necessary above all things that the few hours allowed to a light cavalry trooper be wholly devoted to this employment; for the feeding of the horse constitutes his strength, and his strength is our honor and availableness for service.

Often in war you are unable to have a choice as to the description of forage that you give to your horses; but nevertheless there are certain points that we should always be careful about: It is better to give green fodder than new hay. The green fodder, cut in meadows, where the grass is of some height, is the best; next, amel rice is the least indigestible green fodder, but it is not so nourishing as lucerne and trefoil, or clover.

If you have nothing but clover, be on your guard. Our cavalry, which reached without loss the banks of the *Niémen*, in order to open the Russian campaign, lost in a single night upwards of a thousand horses, who had had too liberal a supply of clover: my own horses were amongst the number of those which fell victims; thus I have bought experience that will save you from a similar disaster by warning you of the cause.

If you have sufficient time to allow of your drying the lucerne or the clover, that you give to your horses, you deprive them of a portion of their noxious qualities. Clover cut in the evening seldom causes sickness.

If you have no grass, you must substitute the leaves of trees: those of the elm are the best.

When you can procure green fodder, which is not moist, take it in preference. If a shower overtakes you in your bivouac, heap up that which you have cut, and, when it is over, give that first to the horses, which has been kept dry.

If you can find nothing but new hay, select that which has been most exposed to the atmosphere, and which is, consequently, the driest; only give a small quantity of it to your horses, and after having first sprinkled it with water: if you can, put salt in the water, which you make use of for that purpose; this precaution prevents gases being disengaged in the stomach.

* In other words, plunder.—TRANSLATOR.

The oats, which you find in the granaries, are generally new ; give only a small quantity at a time.

If you find any other grain besides oats, endeavor to make it swell in water, before you give it to your horses ; and, to this end, soak it five or six hours in water ; if this be out of your power, only, give it in small quantities, and withhold water from your horse until he has thoroughly digested it.

Horses, when fatigued, have generally very little appetite ; if you put before them too large a quantity of forage all at once, they become disgusted, and won't eat : you must therefore be careful to give them their forage in small quantities at a time.

These precautions will also be useful in the contrary case : horses, that are great feeders, if they have a large supply of oats or grass before them, may give themselves indigestion and become foundered.

" If you find a standing crop of oats, cut it, and beat it out upon a smooth spot, or upon a cloak. Then, collect the grain, shake it and pour it from a height upon the cloak, and in a current of air ; by repeating this operation several times, you will cleanse it, and may then give it to your horses, without being apprehensive that the little pointed, sharp edged raws will stick in your horse's gullet, make him cough, and wound him.

If you do not wish your horse to lose a portion of his corn, make use of your nose bag.

Never let your horses drink, except when they are perfectly cool ; however, if, when you are marching, and your horses are thirsty, you come to a brook, the officer in command of the detachment should allow them to water, but without unbridling or dismounting, and regain the time lost by quickening the pace.

Whenever you have meat, endeavor to make soup of it ; if the call to horse is sounded before it is ready, upset the kettles, but carry the meat along with you.

If you have no time to make soup, cut your meat into pieces, and let each individual grill for himself ; but don't employ your sword's point for a toasting fork ; you will destroy your weapon ; put your meat at the end of a stick. If you have a fowl, suspend it by a thread from one end of a crooked stick, the other extremity of which must be driven into the ground at a sufficient distance from the fire to prevent its burning ; then with your forefinger

and thumb impart a vertical rotatory motion to the fowl, which will thus be properly roasted on all sides.

If you have flour, endeavor to make bread; if you can't, knead some cakes with a little salt and water and bake them on the ashes; or you may make doughnuts, and cook them in boiling water.

A trooper, who knows what he is about, always carries in his haversack, first of all salt, next pepper, onions, and garlic; with these seasonings nothing will come amiss.

After you have eaten, if any of your victuals remain, do not cast them away; who knows but that tomorrow you may be dying of hunger.

A small tin saucepan is a treasure in campaigning. I have known troopers who never wanted for any thing, and who nevertheless never carried any thing with them but their small saucepan; but, whenever they lent it to a comrade, it was on condition of sharing whatever was cooked in it.

An indispensable article in a bivouac is a knife.

Instances have occurred of troopers, under the pretext of searching for provisions, laying violent hands upon every thing else: this grave crime should be punished with the utmost severity, and a repetition of it be prevented by the remembrance of its terrible infliction. No mercy should ever be shown to a thief.

Q. What distinction do you draw between going out for forage, and starting on a foraging expedition?

A. Going out for forage means nothing more than looking for it in the vicinity of the bivouac, or of the column halted in a particular spot by the officer in command.

Starting on a forage expedition means quite another thing; a body of troops has exhausted the resources of its bivouacs, or of its cantonments. It must then seek at a distance for that which it has no longer in its vicinity. A foraging party is ordered. Numerous detachments of all arms are collected together, and ordered to march. Arrived at the spot pointed out, the cavalry takes up its duties as an advance guard. It posts its vedettes, its principal guards; it even drives the enemy back, whilst the rest of the detachment make themselves masters of the supplies to be found in the village, load them upon carriages, and conduct them to camp where they are regularly served out.

The best method of foraging in a village is to collect the authorities together at once, and make a requisition upon them. If the peasants comply with it promptly, every thing is done regularly, and nothing is spoiled, and you combine with this advantage that of keeping your men together, and in readiness to repel an attack.

If there be no village at hand, and that the object of the foraging party has been simply to procure green provender for the horses, the reapers (the men told off for that duty, T.) protected by our chain, make up trusses which they bind with forage cords, throw across their horses, and regain the camp in perfect order. The body of support then performs those duties which are laid down for escorts of convoys.

Q. What is a truss ?

A. It is two large bundles of forage, of equal weight, tied together and thrown across a horse's back, so that the one on the one side, and the other on the other are poised in equilibrium by the equality of their weight.*

On arrival at the bivouac, the forage is collected together, and a just distribution made of it.

Q. If the enemy attack a foraging party, how do you act ?

A. We protect it vigorously.

Q. If the enemy be stronger than the supporting party ?

A. The reaper troopers quit the field, mount their horses, and come to reinforce it.

Q. If the trusses be already across the horses' backs ?

A. All, or a portion of, the reaper troopers, throw off the trusses, and proceed to join the supporting party. If the enemy be repulsed, the trusses are taken up again; if he be too strong for us, the trusses are lost, but the men are saved,

Q. The reaper troopers are then armed ?

A. Certainly. It is a general rule that in active operations there is no service, of whatever nature, that can dispense with the carrying of arms.

Every time that a trooper is mounted, he ought to be complete, and leave nothing behind him that he will require to go back for.

* The tautology is in the original.—TRANSLATOR.

Q. Is it possible to calculate by a simple inspection the number of rations of grain or forage, dry or green, contained in a heap of grain, a stack of hay or straw, and a meadow?

A. I shall reply to this question by quoting the calculations formed by Captain *Jacquinot de Bresles*, in his excellent work, entitled Course of Art and Military History.

A cubic metre (=61028 cubic inches,) of hay well pressed together weighs about 292·801lbs.

A cubic metre of straw 191·4519lbs.

It is very easy, by multiplying together the three dimensions of the space occupied by the provender to know the number of metres contained in it; but, if these should be in cylindrical stacks, we may still know the number by multiplying the radius of the lower circumference by the circumference of the circle itself, and halving the product; and then by multiplying the result by the height of the stack.

A cubic metre of grain contains ten hectolitres,* (220·09667 gallons), and one hectolitre contains about twelve moderate feeds: a cubic metre therefore contains about 120 rations.

A hectolitre of wheat weighs about..... 168·9279lbs.

of amel corn.....	157·666	"
of barley.....	146·4039	"
of oats.....	90·095	"
of maize.....	180·190	"

A good soil produces by the hectare, equivalent to a square of 83·61 yards, about 6757·1lbs. of green forage; a poor one yields from 3378·55 to 4504·7lbs.

* 1 hectolitre=22·009667 english gallons.

CHAPTER XV.

• ON THE PIPE.

We must endeavor to inspire the light cavalry trooper with a taste for the pipe.

Q. Wherefore?

A. Because it keeps him awake.

The pipe is a secondary distraction from care, which, far from loosening the soldier's attachment to his duty, reconciles him to it, and renders it more durable. It soothes him, it employs the vacant time, prevents thinking, and retains the man in the bivouac, close to his horse. Whilst he is smoking his pipe there, seated upon a bundle of hay or grass, no one will venture to take away the provender from this horse to give it to another: he is sure that he eats it, and that he is not kicked: the provisions in his haversack are not stolen; and he casts his eye over the repairs necessary to be made to his saddlery, and perceives the bad stowage of his kit. He watches over, without fatiguing himself, the horse of a comrade, and this comrade, on whom he confers this obligation, goes for the water, the forage, the provisions, which he requires.

The hour for relieving the main guard arrives. You set off. There, you are forbidden to sleep. What a resource does the pipe not then become, which banishes sleep, wings the hours, renders the rain less piercing, hunger and thirst less vehement, &c.

And, if you have long night marches, after the fatigue of a bustling day, these marches, in which sleep, by overwhelming you, becomes a real, an unconquerable, source of suffering, and the cause of numerous injuries to the horses: in these cases, nothing will keep you awake like the pipe.

The pipe obliges us to carry a steel and tinder: with this steel and tinder we light the fire at the bivouac.

There are no trifles on active service, in which a man is reduced to his limited resources, which have not their own degree

of importance. 'The pipe is a medium of exchange, of enjoyment, and of obliging each other in our life of fraternal relationship: when lent in certain cases, it becomes of valuable assistance. *Whatever Aristotle and his learned clique may say,* smoke, and make your light^{troopers} smoke.'

CHAPTER XVI.

OF MAIN GUARDS, PICQUETS, OUTPOSTS, VEDETTEs, AND PATROLES.

Q. What is a main guard?

A. The main guard is an advance guard, placed between the post and the detachment, to relieve the vedettes, or to support them in the event of an attack by the enemy, so as to afford the necessary time to the detachment, or the cantonment, which it covers, to prepare for defence or retreat. (L. R. A.)

Q. Where is the main guard posted?

A. Upon the road, which it is conjectured that the enemy will take in order to attack the bivouac.

Q. Wherefore?

A. To delay this attack, and to give the bivouac time to get in readiness to receive him.

It should be posted as centrically as possible with reference to the line of the vedettes.

Q. Wherefore?

A. Because the vedettes, when attacked, and retiring upon it, will meet at their point of support at the same time.

Consequently, the forking of several roads, or footpaths, is a favorable place for posting the main guard.

A main guard ought to hold the same position relatively to its vedettes, as the base of a fan does to the further extremities of its sticks.

Q. Who is it that posts the main guard?

A. The superior officer in command, if he have not with him a very intelligent officer on whom he can place implicit reliance.

Q. When does he post it?

A. After having thoroughly reconnoitred the ground, and acquired the very best intelligence that he can collect regarding it.

Q. How do you calculate the strength of the main guard?

A. By the number of vedettes, calculating four men for every vedette that is to be posted. (L. R. A.)

Q. How do you form a main guard?

A. Arrived at the ground, where we purpose to halt, the advance guard being on horseback, the men warned for main guard leave the ranks and come to the front of the line, facing the enemy. The officers detailed for the guard break them off and march them off under the orders of the officer commanding the advance guard, who has already reconnoitred the ground. Having reached the spot, where the main guard is intended to take up its position, they form in line and halt. The men for the outposts are then detailed; they come out of the ranks, and form in front of the main guard, facing the enemy. The corporals, or lance corporals, entrusted with the command of each of these small guards of four men, leave the ranks, and examine the men placed under their orders. This preparatory duty having been performed, the outposts form together in one body, and march off under the orders of the officers* of the main guard, and under the guidance of the officer commanding the advance guard, or of the officer detailed by him for that duty. This officer directs his course to the central point of the chain of outposts about to be formed, and halts. The central post is first formed, and the vedette supplied by it posted; then the posts, which are to form the chain on one wing, set off together, and are halted in succession, planting their vedettes.

This duty performed, the commandant of the advance guard, always accompanied by him of the main guard, returns to the central point, proving the line of vedettes which he has posted, and making any alterations that he may find necessary: he then completes the chain, by doing for the other half of it what he has done for this.

Q. Is there no particular point to be carefully attended to by him in posting the vedettes?

A. Yes: he must impart to the officer commanding the main guard the topographical information which he has derived from the ground, and communicate to him his precautionary measures.

* In the original, the word is "commandants." There can be but one commandant, although several officers are detailed for the same guard. We have therefore given a sense more agreeable to our English notions.—TRANSLATOR.

against the attempts of the enemy ; so that this commandant may be fully informed upon all the points which require his special attention. He adds to these details the orders which he thinks ought to be issued, if such and such circumstances should occur.

Q. What does the officer commanding the main guard do when he returns to his post ?

A. He makes his men dismount ; and then arranges the duties of the rounds. He directs the officers, or non-commissioned officers, who may be ordered on this duty, to visit the chain of posts and vedettes.

He then accompanies the officer commanding the advance guard, who points out to him the line which his main guard should take up at night, and issues the necessary instructions to him as to the direction in which he ought to retreat in certain circumstances. He accompanies this officer as far as the piquet, the situation of which he fixes in his memory. On returning to his post, he again thoroughly examines the ground that he is passing over, so that, in the case of the main guard being attacked, he may be able to make it fall back equally as well by night as by day, availing himself of the configurations of the ground, from whatever quarter the attack proceeds, and so that his retreat may not be embarrassed by the obstacles of this same ground.

Q. Having reached the main guard, what does this officer do ?

A. He gives the parole, which is communicated to the outposts; he inspects the arms ; receives the forage sent in to him by the picquets or the regiment ; has half the horses unbridled and fed, directing the troopers to remain by their horses and not unpack their kit. He repeatedly visits his outposts and vedettes, proceeding to them from outside the chain, in order to judge more correctly of the facility afforded to the enemy of surprising them. He requires that his vedettes should invariably challenge him, when he approaches their beat : he then puts questions to them in order to satisfy himself that they are thoroughly acquainted with their orders, and inspects their arms in order to see that they do not miss fire. He repeats these rounds the oftener in proportion as the enemy is closer at hand, as his men are less instructed, more fatigued, and the weather unfavorable.

He allows the main guard and the vedettes to wear their cloaks, but prohibits these last from putting up their capes, which would prevent their hearing.

When the weather is very inclement, he shortens the tour of the sentries.

If the enemy put himself in motion, he informs the commandant of it immediately. If the movement of the enemy be an important one, he despatches an officer, or intelligent non-commissioned officer, to detail it more explicitly.

If his vedettes fire, he makes his men bridle and mount, and proceeds in person to the spot where the firing is heard.

If he be attacked, he falls back in order, skirmishing, and acting as is laid down in the Chapter on Rear Guards. (Chapter XXXV.)

If the rounds happen to pass, he challenges them himself. He sends out patrols who connect the posts together. These patrols, selected from among the half of the troopers, whose horses are bridled, are sent out more frequently in proportion as the posts and vedettes are at a greater distance from each other.

Every time that he quits his main guard, he leaves conditional orders with the next senior officer, to whom he gives very minute instructions.

Q. Ought a main guard to light a fire?

A. Occasionally; but care must be taken that it does not emit too great a light, and that the situation selected for it be such that the enemy may see it as little as possible.

Q. What is an outpost?

A. The main guard of the main guard.

Q. What are the duties of a commandant of an outpost?

A. The commandant of an outpost places its vedette; gives him the parole, the signals agreed upon and the orders. He then carefully reconnoitres the difficulties of the ground around him, and the obstructions or facilities which they offer, in the event of an attack, to his retreat in good order upon the main guard. He has his eye constantly on his vedette, as well as upon those in his neighborhood, and upon the line of country in advance of the point entrusted to his keeping.

As soon as his vedette makes a signal, which he does not understand, he mounts and proceeds to ascertain what is the occasion of it. If the matter be serious, he makes his men mount, and sends notice to the main guard. If it be trifling, he re-assures the vedette, reprimands him, and makes the signal to the outpost to

dismount, so that this movement, which denotes that all is quiet, may re-assure the main guard.

If the vedette discharges his piece, the outpost mounts immediately. Every time that the commandant of an outpost proceeds to a distance from it, he ought to remain in sight of his men, and agree with them beforehand on the signals for their either mounting or dismounting.

If, by proceeding in advance of his vedette, he perceives movements which have escaped his notice, he ought to make him observe them, either by signals, or by going to him and warning him, and rebuking him sharply for his inattention.

He ought often to inspect the arms of his detachment, especially of him who is posted as a vedette.

Rest and sleep are interdicted to every commandant of a main guard and outpost.

At daybreak or nightfall their vigilance ought to be redoubled, because these are generally the periods of attack. They ought to see every thing with their own eyes, and forbid their men to indulge in panics and alarms, which spread contagiously, make a whole army stand to its arms, and cast a stigma upon the officer commanding the post whence they originated.

During the whole time that reconnoitring parties are out, the outposts should remain bridled.

Q. Ought an outpost to fire?

A. Not without special permission.

Q. Ought it to unbridle?

A. Never.

Q. What is a vedette?

A. He is the mounted sentry, who is posted nearest to the enemy.

Q. What is his duty?

A. To watch the movements of the enemy with the greatest attention, if that enemy be within view; to be all ear to the slightest noise, all eye to the smallest incident, which may affect the safety of the detachment to which he belongs; to make signals to the post which appears to him to be threatened; to give warning of the attack by discharging his piece.

Q. What is the best position to select for posting a vedette?

A. That, whence he can see every thing without being perceived himself : thus the face of a wall, a clump of trees, a hedge, a rather deep ditch, are favorable spots to masque a vedette : he must be careful not to neglect to avail himself of them for these purposes.

Q. *If the place whence the vedette can command the best view, be the summit of a bare rising ground, what is to be done ?*

A. The vedette must be placed a little behind the summit so that the edge of it may cover him as much as possible, without intercepting his own view.

Q. *If it be a lancer that is posted as a vedette, and having it in his power with a few precautions to conceal himself from the view of the enemy, how ought he to do so ?*

A. Lower his lance, or take off its banderolle, that it may not betray his position.

Q. *If the ground, on which the chain of advance posts is traced, be undulating, ought the vedettes to be placed in the hollows ?*

A. The vedettes should be posted every where in those directions whence we may apprehend the approach of an enemy. Thus, such a vedette is upon the height to watch the plain ; such another is at the foot of a mountain to observe a gorge, a wood, a hollow road, or a ford, and to protect the vedette, who, on the height, might be taken in rear before he was aware.

Q. *What more do you observe in the selection of your posts for your vedettes ?*

A. You will take care that the vedette, whom you place in a hollow, may be able to see as distinctly as possible one or two of those who are in line with him, in order to be warned by them of any danger that he may incur by a movement of the enemy.

Q. *What ought a vedette to do ?*

A. Never to dismount, unless he receive orders to that effect from the commandant of the main guard, and always to have his carbine or pistol ready.

Q. *What orders do you give a vedette when you post him ?*

A. You point out to him the particular portion of ground which he is to keep his eye on. You particularise to him the most important points which you recommend him never to lose sight of ; you desire him to have his eye very often on the vedettes, who form the line along with him ; then you give him

a conventional signal whereby he gives warning to his outpost, the individual in command of which immediately mounts, and proceeds to reconnoitre.

Q. Can you judge of the distance at which you can see the enemy?

A. At 2187 yards men and horses appear like points ; at 1312 yards, you can distinguish cavalry from infantry ; at 875 yards, individual movements can be discerned ; at 765 yards, you can occasionally distinguish the head from the body ; at 438 yards, you can make them out distinctly.*

Q. Is a vedette allowed to quit his post, or change his position ?

A. Never, on any pretext whatever, unless special orders be issued to advance.

Q. Should he observe any thing else besides the enemy ?

A. He ought to remark every thing which occurs : thus, if he see a peasant come out of a wood, go back again, again issue forth, and approach the vedettes, he is probably a spy ; in this case, he ought to make a signal to the outpost.

If a cloud of dust arise regularly on the horizon ; it is possible that there may be a column on the march there ; he ought in like manner to give intimation of it.

If a signal be made by another vedette, he ought to repeat it, and give warning to the outpost.

Q. What do you do, when the danger is imminent ?

A. Double the vedettes. In this case, one of them can come, and give notice, when it is requisite, whilst the other continues on the look out ; and, if the vedettes have particular orders to proceed in advance of their posts to reconnoitre every thing passing in front of their chain, they should arrest suspicious looking persons rambling about, &c. ; one of them performs this, whilst the other remains on his post. In this case also, if the enemy advance,

* *Jacquinot de Breesles.* The English rule is as follows : From 220 to 230 yards, all the parts of a man's body are distinguishable by a man with common sight ; from 400 to 450 yards, you can no longer see all the parts, but you do the head, the body, the arms, and motions, as well as the musquets of the men. At 600 yards, the head and lower parts of the body are still to be distinguished. At 700 and 800 yards, the body appears a lengthened form, the legs of men in motion and that of the arms extended, or sideways, are still distinguishable. At 900 and 1000 yards, the files and movements of troops are still to be distinguished. Vide Madras Gunner's Assistant, page 6.—TRANSLATOR.

the vedettes, being more numerous, already form a line for defence, and skirmish as they retreat, if they be not pressed too closely.

Q. What should a vedette do, when he perceives himself about to be attacked?

A. He wheels his horse, with the right flank towards the enemy, in order to be ready to complete his wheel about; and, when the movement of the enemy becomes decided, he fires.

Q. How do you relieve the vedettes?

A. Generally every hour; which shews you that the relief of the small picquets of four men will be completed every four hours.

Q. Do you place your vedettes at night the same as in the day time?

A. At night, the vedettes are posted nearer the small picquets, the small picquets nearer the main guard, and the main guard nearer the detachment. The line of horizon of a vedette can never be too extended in the day time; but it is not the same case at night; and, in order that the eye of this vedette may be able to distinguish objects, especially when the night is dark, the line of his horizon must be brought much closer.

To this end, the vedette, who, during the day, was posted upon a height, will, at night, be placed in a hollow, and will direct his eye upon that line of ground which falls within a useful distance, and which will cut the sky. If the enemy make his appearance, however dense may be the obscurity, his outline upon the horizon will be perceived by the vedette, who, at the same instant challenging, "who goes there?", will fire, if he receive no reply.

The position for the night ought not to be taken up until it becomes sufficiently dark to prevent the enemy perceiving your retrograde movement. That for the day should be taken up just before daybreak, so that the enemy may not be able to discover what position you have just quitted. In this forward movement, send out feelers that you may not fall into an ambuscade.

Q. What is a picquet?

A. A body placed intermediately between the detachment and the main guard.

Q. Where is the picquet posted?

A. Supposing that a body be bivouacked in rear of a village, the picquet will be posted at the other extremity of this village,

towards the enemy, and at some hundred paces in rear of the main guard.

Q. May it take up its quarters in the houses?

A. The horses may be collected together, and put under cover in open barns ; the men will bivouac.

Q. Do the horses remain bridled?

A. One half only.

Q. What is the usual strength of a picquet ?

A. Of the same strength as the main guards.

Q. What are its duties ?

A. It posts a sentry twenty-five paces in its front, whose duty it is to listen to every external noise coming from the direction of the main guard, and to hinder the men bivouacked in the rear from passing to the front without permission.

Q. Is there not also a sentry over the arms ?

A. No ; for the arms remain on the horses' backs, and the above mentioned sentry is not far off.

The picquet secures the rear of the main guard ; it furnishes patrols, who feel around the front and flanks.

If the main guard be attacked, it gives warning to the detachment, mounts, supports the advance posts, and only retires along with them.

The officers of the picquet may sleep alternately.

Q. Every time that there is a main guard, is there also a picquet ?

A. No ; it is necessary, in order that a picquet may be required to support the main guard, that one should be very close to the enemy; and that attacks may be probable. When these conditions do not exist, it is useless to double the duties ; only, the vigilance of the detachment in its bivouac ought to be greater.

Q. What is a patrole ?

A. A detachment of flying vedettes.

Q. How are patroles constituted ?

A. Generally of two troopers, commanded by a corporal, or a steady old hand.

Patroles are more useful than vedettes ; sometimes, they are altogether substituted for them. But, in that case, they are continually on duty, and must exercise a constant vigilance.

Q. Under what circumstances does this take place ?

A. If infantry bivouac with cavalry, the infantry furnishes the sentries, and the cavalry the patroles.

If a partisan, harassed and in a dangerous situation, has retreated and barricaded himself in a farm, and can command an extensive view from the roof of the buildings, he does not post vedettes, but he sends patroles round it.

Good patroles, intelligently conducted, are, in general, of more use than vedettes.

Q. Whercfore ?

A. Because their duty does not allow sleep to the troopers ; because it compels a man to develop all the resources of his intellect and his courage, and because they more thoroughly explore the country, and take a wider range of survey.

Q. What ought men to do when patrolling ?

A. To proceed without noise of any kind ; consequently no conversation must be carried on. The scabbard of the sword should be secured in such a manner as not to jingle against either the stirrup iron or the spur. The carbine should be held in the right hand so as not to strike against the carbine swivel or the brasses of the banderolle.

The horse should follow a soft road, in order that his shoes may not clatter against the stones. If it be day, the man should pass along a hedge row, walls, hollow roads, ravines ; he should lower the point of his lance, to prevent its banderolle discovering him ; he should plunge into woods, and make his observations through its glades.

If it be night, he should endeavor to penetrate through the gloom by his eye. He should halt, should follow hollow roads. He should be on his guard against smoking, and throwing light upon his face.

If he fall in with the enemy, he should neither fire nor shew himself. He should examine him narrowly, count him, discover his plans. One of the troopers, forming the patrole, if he can do so without being discovered, should proceed and give notice to our main guard.

Troopers, when patrolling, ought not to march alongside of each other, but rather one behind the other, and at an interval of some yards, in order to have a better view, to afford each other

mutual protection, and, in case of falling into an ambuscade, to prevent their being all cut off and made prisoners together.

The line pursued by patroles may be either interior or exterior, with reference to our vedettes. In the second case, the vigilance ought to be much greater than in the first because the danger is more imminent. The patroles, which pursue the external line, ought to consider themselves as flying vedettes, which have the advantage over stationary ones of reconnoitring every thing which appears suspicious, of marching, halting, and concealing themselves, as long as they may, consider it necessary.

It is often useful to send out patroles of one or two men, to place themselves at considerable distances, and to remain there for some hours.

A patrole, which has proceeded too far, and is challenged by a post of the enemy, ought to be careful not to reply, if the troopers, composing it, do not speak the enemy's language, or if, before starting, they have not learned a word or two of that language, the pronunciation of which may check the reconnaissance, and give them time to turn bridle without danger, and to gain ground in retreating.

If the enemy be marching down upon our posts, and be likely to arrive there before they can be warned of their proximity, the patrole should deliver its fire, and return skirmishing by the road which it had taken to reach the spot where it is.

I have been told that, in the campaign in Portugal, our cavalry, having to march over a rocky and sonorous soil, wrapped some pieces of sheep's hide, the woolly side in, round their horses' feet, the hide being fastened above the fetlock, and that thus our patroles approached the English vedettes very closely without being heard by them. This plan may be very good in similar circumstances.

A trooper patrolling, despite of his vigilance, may be surprised, especially if his road lie through a wooded and intersected country. He should repeatedly halt, and steadily watch his horse's ears; their attentive direction may give him intimation. Let him not despise these warnings, and, if the attention of the horse increase even to terror, he should carefully ascertain the cause of this fine instinctive feeling.

Two patroles, meeting each other, beyond the advance posts, should recognise each other without challenging.

It is a proper precaution to give previous notice to the advance posts of the departure of patrols, of their strength, their uniform, &c., so that there may be no doubt nor hesitation when they make their appearance or their return.

Q. Do the main guard and picquets go for forage?

A. No. If the enemy be in their neighborhood, or a surprise be anticipated, the detachment then sends to them what they require for the support of their men and horses. *

Q. How are the horses of a main guard taken to water?

A. By few at a time, and those, whose turn it is to go, always waiting until those, who have preceded them, have returned.

CHAPTER XVII.

OF DETACHMENTS.

Q. How does light cavalry march on active service ?

A. Almost always in detachments. /

Q. What is a detachment ?

A. Every body separated, by order, from the corps d'armée, division, brigade, regiment, squadron, section, to which they belong.

Q. Are there many descriptions of detachments ?

A. Yes.

Q. What are they ?

A. Detachments properly so called, advance guards, rear guards, main guards and picquets, reconnoitring parties, patroles, foraging parties, escorts, and partizans.

Q. Have these detachments a peculiar duty to perform ?

A. They have a distinct duty, of which the most unremitting vigilance is the main spring, and the safety of the body which they protect is the object.

Q. How are service detachments composed in a regiment ?

A. By selecting an equal number of troopers from each squadron, in proportion to the numerical strength of those squadrons.

Q. Why not in preference compose the detachments of men all taken from the same squadron ?

A. Because, if any accident were to happen to the detachment, one squadron might find itself deprived, for the rest of the campaign, of its officers or troopers, whilst the other squadrons of the same regiment would remain complete.

Q. To whom is the command of these detachments entrusted ?

A. To the officers and non-commissioned officers, in their turn for duty, commencing from the top of the seniority roll of each grade.

Q. Is this rule to be invariably observed ?

A. No. In cases of great moment, those officers and non-commissioned officers are selected, who have evinced the greatest merit, zeal, and courage : it is the business of seniority to combine these qualities with its claims, if it would not experience the mortification of being superseded.

Q. What should be the first care of an officer commanding a detachment ?

A. To inspect his detachment before he marches ; to satisfy himself that the horses are properly saddled, well girthed, kit well stowed, and the horses properly shod ; that the men have their ammunition ; that their swords are sharp, and their lances' points good ; that their fire arms are in good order ; and that new flints have been fixed.

Q. What is the second duty of the commandant ?

A. To make his detachment mount expeditiously.

Q. The third ?

A. To bring it under fire in the most advantageous manner.

Q. The fourth ?

A. To arrange proper seasons for food and rest.

Q. There are occasions, on which the commandant, before commencing his march, cannot inspect his detachment : for instance, when he has to make a hurried start during the night, or in bad weather ?

A. When day breaks, or the rain ceases, the commandant makes his inspection without halting, by making them march with their ranks open, and placing himself in the interval : he points out to the officers neglects which have occurred, and at the first halt these are corrected under the personal supervision of these same officers.

Q. When a detachment is marching in column of route, and at a distance from the enemy, how does the commandant act ?

A. After having formed his advance and rear guard, he takes it on the road, which he ought to follow. He then halts himself in order to make the inspection of which I have just spoken, to satisfy himself that the officers and non-commissioned officers are in their proper places, and attentive to their duty ; that no one is lagging in the rear ; that none of the horses are lame ; that their riders are not uselessly wasting their powers ; that the rear guard

is at a proper distance, and that it makes the loiterers keep up. After having marched some time in the rear of the column, in order to regulate every thing under his own eye, he returns to his proper place at the head of the detachment.

After three quarters of an hour or an hour's march, when the horses' bellies are empty, he halts the column that they may stale ; makes the men dismount, re-adjust the girths, ties up the tails again that have become undone, and correct the faults of the adjustment, package, saddling, which he has noticed in his inspection. He then orders them to re-mount, and sound the march, which he resumes as soon as possible at open order.

When the ground is undulating, and the head of the column reaches the top of a rising ground, he turns round in order to judge of the regularity of the march.

If the stride of the leading files be too long, he reduces it; if it be too short, he makes them step out.

It is better that the stride should be too long than too short. If the horses which step short, interrupt and break the regularity of the march, he sends those horses to the rear of the column.

He endeavors to infuse cheerfulness into the column, and makes the men sing and chat.

If the column be composed of several squadrons, he recommends the different commandants of each not to press too closely on the first, and to march independently.

He must halt from time to time in order that those intervals, which have become too great, may be closed up.

Half way, however short the day's march may be, he forms column of squadrons at division distance, upon the flank of his road ; makes the detachment dismount, and halts for half an hour, during which the men breakfast.

The officers profit by this halt to rectify any thing amiss in the package.

This halt is essential, because the men on arriving at their journey's end, will have nothing to do but to attend to their horses.

If the march be a long one, the commandant, on resuming it, does so, left in front.

If the march last for several days, he makes each squadron in succession lead the column.

Q. What quantity of ground will a detachment in column of route get over in the course of an hour?

A. Cavalry in column of route at the walk gets over about 5416 yards an hour, and nearly double the distance at the trot.*

Q. If the detachment come to a river too deep for the horses to find footing, how is it passed?

A. With a wide front, whose mass will breast the current : the troopers up the stream are less exposed than they would be if they were to pass singly, and those lower down cross it more easily.

Q. What precautions do the troopers take?

A. Before entering the water, they unbuckle their waistbelts which they fasten around their necks, after having hooked their swords to them, and in such a manner that they hang behind their backs.

They then throw their carbine over the right shoulder, as if they were about to mount.

Having entered the stream, they lift their legs up behind, bend the body slightly forwards ; uphold their horses very lightly with the snaffle rein in their left hand, and with the right take a grip of the mane half way up.

If they bend backwards, hold by the bridle, or seize the mane too far up, if they displace the centre of gravity, if they do not sit easily on their horses' backs, they run the risk of overbalancing them, drowning them, and being drowned along with them.

Q. If boats be found on the bank of the river, but too small to carry the horses over ?

A. The men enter them, holding their horses by the bridle, who follow them swimming.

Q. If a ferry boat be there ?

A. The men do not enter it, until they have previously dismounted.

Q. If the detachment find a bridge of boats ?

A. The troopers dismount in order to cross over it.

Q. Having arrived at their quarters, what does the commanding officer do ?

A. After having heard what the officer or non-commissioned officer, entrusted with the billeting, has to say, and determined

* Equal to 2·59 miles an hour.—TRANSLATOR.

the distribution beforehand, he forms his detachment up in the most centrical position, and issues his orders immediately, so that the horses may be housed as soon as possible.

He takes care that the horses are not unsaddled for three or four hours, and that they are not watered for an hour and a half after their arrival; that the squadron officers visit the stables, and have a daily inspection of the horses. He takes a note of the squadrons which continue to have the greatest number of horses chafed.

If he make a short halt, during which the horses can eat and drink; he gives them first half their feed of oats; then their water; after that, the rest of their oats, and starts immediately afterwards.

If a detachment, whose horses have not drunk for a long time, come to a brook, and it is apprehensive that it will find no other water during the day's march, it waters them slowly without unbridling, and continues its route immediately, that the horses may not get cool.

Q. On active service several of the above rules cannot be observed?

A. On service, one does what he can, and always the best that he can, taking as a rational basis the precautions observed in peace for the preservation of the health of the horses and men.

When near the enemy and on the alert, the column is locked up, the arms are slung; to every thing we adapt that arrangement which enables us to place ourselves as rapidly as possible in readiness for attack or defence in whatever unexpected position we may find ourselves.

If bad ground, a ford, a narrow bridge, &c., compel us to break into single file, the commandant of the detachment reforms column in succession on the other side of the defile, and does not resume his march until all his men are again formed up.

If he be marching by night, through woods, or over difficult ground, and if he have no object in concealing his march, the officer in command calls the commandants of squadrons together, and gives them the following orders, which he makes each of them repeat, and which they communicate to their squadrons, when they rejoin them.

The trumpeters will march at the head of their respective columns.

Every sound, no matter from what squadron it is heard first, will be taken up by them.

The "*march*" signifies that the detachment is to proceed, onwards.

A single call, "*halt*."

Two calls, that the country is open, and that the detachment will form close column on the leading detachment.

Three calls, that a squadron has missed its way.

Four calls, that it has rejoined the line of march.

No intervals are to be left between the squadrons.

The officers and non-commissioned officers will march in the column at the head and in rear of their respective sub-divisions. They will carefully watch that the troopers maintain an upright position and that none of them fall asleep.

Each squadron will send a commissioned and two non-commissioned officers to its rear, who will pay attention that the squadron behind them does not lose the track. If, at a difficult passage, they perceive that they are not followed, they will leave a trooper, who, by his shouts, will point out to them where he is. This man will rejoin, so soon as the trumpeters of the expected squadron reach the spot where he is.

If the squadron, by remaining too much in the rear, give reason to apprehend that it has missed the road, the officer will call out, and have passed on from mouth to mouth up to the head of the column,* the intelligence conveyed to him by the trooper left in the rear.

The officer commanding the squadron will give notice to the commanding officer by sounding three calls, which will be taken up several times by the different trumpeters.

The commanding officer will sound the halt by one call.

As soon as four calls announce that the strayed squadron has rejoined, the "*march*" will put the column in motion again.

These orders having been given, the officers return to their posts, and the officers, and non-commissioned officers, are posted as has just been pointed out.

Q. If the commandant of a detachment in a hostile country,

* That is, of the column of the squadron, not of the regiment.—TRANSLATOR.

fearing that he shall arrive during the night at his bivouac, and find no forage there, fall in with full barns, what does he do ?

A. He halts his detachment, posts a sentry at the door of the granary, makes the men dismount, and bind up regular bundles, which each trooper carries on his horse. He then continues his march.

Q. If a horse, from weakness, or an accident, be unable to keep up, what is to be done ?

A. Send it to the rear by his rider, who will lead it.

Q. If the horse be injured so as to become unserviceable ?

A. The commandant assembles the officers and the farrier, and if it be unanimously decided that the horse is thoroughly unserviceable, it is shot, and his trooper, carrying his saddlery and equipments, is sent to the rear, to the nearest small depot.

These rules are applicable to every detachment. Circumstances alone modify them in execution. Let us pass on to particularities.

CHAPTER XVIII.

OF DETACHMENTS PROPERLY SO CALLED. *

Q. What is a detachment properly so called?

A. A body separated, by order, from the body to which it belongs, without instructions to reconnoitre, to form a guard, to patrol, to forage, to form escorts, or perform the duties of partisans.

*Q. Explain yourself? **

A. An officer commanding a regiment has his first squadron in position at the distance of a league from him; reports lead him to apprehend that it is not sufficiently strong to be able to sustain the attack with which it is threatened; he detaches the second to support it, and to put itself under the orders of the officer commanding the first. This body, whilst marching, is a detachment properly so called.

Portions of troops, left in the rear in the small depots, rejoin the advance posts; they are in detachment properly so called, until they reach their destination, &c.

CHAPTER XIX.

OF ADVANCE GUARDS.

"General Steingel, an Alsatian, was an excellent officer of hussars ; he had served under Dumouriez in the campaigns of the north; was skilful, intelligent, active ; he combined the qualities of youth with those of advanced age. He was a real general of advance guards.

"Two or three days before his death, he was the first in the *Lézégo*; the French general arrived there some hours later, and every thing that he required had been done ready to his hand.

"The defiles and the fords had been reconnoitred, guides had been procured ; the curate, and the postmaster, had been questioned ; an understanding had been established with the inhabitants ; spies had been sent out in different directions ; the letters by the post had been intercepted, and those which contained any military information had been translated and analysed ; every measure had been taken to establish magazines of provisions for the troops."

"Napoleon, Campaigns in Italy."

What can be added to this admirable portrait of an officer of an advance guard ? His whole acquirements are summed up in a few lines.

Learn them by heart ; repeat them ten times a day ; engrave them so deeply on your memory and in your thoughts, imbibe them so completely, that at every moment they shall be present to your recollection ! And then endeavor to resemble Steingel !

In order to deserve the appellation of a good officer of advance guards, you must, so to speak, be capable of commanding the numerous troops to which it opens the way.

The efficient officer of an advance guard estimates the deployment of the troops in his rear ; the positions which they will take up ; the wants which they will have ; the attacks which they will support.

The weak body, which he commands, will occupy but a small portion of his thoughts; for it is but a speck in the space which his vision ought to embrace.

He acts, ~~not~~ with reference to it, but rather to the body in its rear.

He is not alone, like an officer reconnoitring; his detachment forms part of a grand whole; if necessity arises, he sacrifices himself, he sacrifices it to the very last man, in order to maintain for his division, or the army to which he belongs, a key of position, the entrance of a defile, &c.

His duties are,

I. To thoroughly reconnoitre, on a comprehensive scale, the country, over which he passes, under its offensive and defensive aspect.

II. To compel the enemy to deploy, and shew him his strength.

III. To sound his plans, and judge of the importance and possibility of their execution.

IV. To prepare, so to speak, the quartering of the troops, which he precedes, and to add thereto every thing that may be essentially useful to them, and information of every description.

There is not a chapter in this volume which ought ~~not~~ to be consulted by the officer of an advance guard; therefore I refer you to them for all the details, and shall confine myself here to pointing out his duties succinctly, and to stating such things as are not to be found in the other chapters.

An officer of an advance guard is more or less his own master. He is ordered either to march in a certain direction and to arrive promptly at a certain point; or to follow the enemy cautiously, and to profit by all his mistakes, and every advantageous circumstance that may occur.

Q. In the first case, how does he act?

A. He executes his orders with promptitude.

Q. In the second?

A. He feels his way, marches step by step, does not venture upon such and such a road, until he has well weighed the results that may flow from his decision; combined the special duties upon

which he is sent, with the relative importance of a check, which he may experience, the distance of his supports, &c.

His detachment marches in good echelon order, and always in readiness to front every way, mutually supported from his first skirmisher to the last man of his rear guard. Every one of his sections and of his troopers, occupies its or his particular position, and always the one most conducive to the unity of his movements : every thing is calculated ; nothing is left to chance.

Every indication is carefully studied by him. Does he find abandoned bivouacs ? He reads, in their smoking and sometimes bloody remains, the proximity, the number, the losses, the weariness, the demoralization, of the enemy.

At the forking of a road, should he perceive numerous marks of footsteps, tracks of wheels and horses, which here diverge, he halts, and, by their freshness and the reports of the peasantry, the reconnoissances which he sends out, and the traces laid down in his map, he forms a judgment of the intentions of the enemy.

Q. If he fall in with a defile ?

A. He reconnoitres it from the heights which command it, he searches it cautiously, and always after having formed up his detachment on the hither side, so that it may be prepared for any sudden attack.

Q. If he have threaded this defile, and fear to be cut off and separated by the enemy from his division, or corps d'armée ?

A. He leaves in it a detachment sufficiently strong to maintain it until he has satisfied himself whether his fears have any foundation.

Q. If he arrive in front of a village ?

A. He halts his detachment, and has it reconnoitred by his furthest advance guard ; if the enemy is not there, he makes one-fourth of his detachment pass rapidly through it and search it, posting some vedettes at the points where they issue from it ; these vedettes have orders to fall back slowly at the sound of the first carbine shot.

Q. If he establishes himself in it ?

A. He takes possession of the belfry, in which he posts a sentry during the day ; he establishes his bivouac defensively in rear of the houses on the side, by which he would retreat ; has provisions and forage brought thither, barricades all the passages

by which the enemy might endeavor to surprise him, leaving small openings, which are indispensable for the retreat of his posts; he points out the alarm post; seizes and interrogates all the inhabitants, who can give him information, and takes guides, whom he keeps at his bivouac.

Q. What is an alarm post?

A. That defensive position which is evidently the most military, and the most favorable for the collecting together the whole detachment in the case of an attack; consequently that from which the fittest movement of either advance or retreat can be executed.

It is upon the alarm post, with the position of which all the troopers make themselves thoroughly acquainted, that every man ought to fall back, in case of attack; all the outposts only forming portions of the main guard properly so called.

Q. If it should be night when the advance guard reaches a village?

A. Its commanding officer halts some paces on the hither side of it, and sends intelligent troopers to reconnoitre it. These proceed together in silence as far as the first houses, halt and listen, and judge, by the noise, of the presence or absence of the enemy. One of them alights, strides over a hedge, approaches a window where there is a light, looks in, and then returns and reports to his corporal what he has seen. A peasant is seized, and conducted with a pistol at his breast to the commandant who interrogates him.

Q. If the advance guard fall in with the enemy by night?

A. If the enemy have not perceived it, it halts silently, reconnoitres him, and, in certain cases, surprises him, if the opportunity be favorable.

Q. If by day?

A. It feels the enemy, compels him to deploy, approaches him, concealing its strength from him, and always establishing itself in a defensive position, until it conceives that the time has arrived for taking the initiative.

Q. If the enemy be retreating, and if he be endeavoring, for instance, to destroy a bridge?

A. It presses on him and seizes the bridge.

Q. If the enemy have fallen back upon a small town ?

A. It presses him closely, so as not to allow him time to destroy its resources ; to carry off the men whose intelligence may be useful to us ; to take away the letters from the post office, &c.

Q. If the commandant of the advance guard wish to impress upon this town, an exaggerated idea of his own strength, and that of the troops in his rear, in order that this notion, being conveyed to the enemy, may intimidate him ?

A. He presents upon several roads, down which the inhabitants cannot see to any great distance, a few sections, which figure away as the heads of columns. He announces the arrival of numerous forces, orders a large quantity of provisions, makes a requisition for a great number of carts, &c. &c., and takes particular care that no spies of the enemy slip to his rear, and discover his ruse.

Q. And once having entered the village ?

A. He establishes himself in it as a military position and throws out his line of spies to the front and flanks.

Q. If, when the advance guard is en route, a river come in its way ?

A. It reconnoitres its approaches and fords ; and destroys these latter, if they will afford an opportunity to the enemy to intercept, or attack the army when it shall have proceeded in advance.

Q. If an advance guard arrive at a river at the same time that the enemy appears on the opposite bank ?

A. The officer in command forms his judgment immediately as to the particular points which the enemy will select in order to effect his passage, and establishes posts opposite these points.

Q. If, at night time, the advance guard has taken up its bivouac in front of the enemy, and, being weak, wishes to intimidate the enemy ?

*A. It has recourse to *ruses de guerre*.*

It lights a "great number of fires, which it carefully feeds, and the line of which it extends, so as to give a deceptive idea as to its strength. It will make a detachment of fifty men circle several times round a large fire, which will thus appear to be a long column of reinforcements.

Q. If, nevertheless, it be apprehensive of a surprise by night?

A. After its fires are lighted, it gives out that it will take its departure on the morrow, retreats in perfect silence during the night, and takes up a better and unknown position to the rear.

The officer commanding the advance guard ought never to quit his detachment, and, so to speak, *his proper position of command*; nevertheless, if, in order to form a more correct judgment, it will be of advantage that he should boldly risk his personal safety, he should not do so until he has given notice of his intention to his second in command, and left precise instructions with him, so that he may be able thoroughly to supply his place, no matter what may be the circumstances which may occur.

Q. Before proceeding in advance and quitting his division or corps d'armée, what steps does the officer commanding an advance guard take?

A. He makes himself thoroughly acquainted with the orders which the general gives him, and which he endeavors to obtain in writing; he begs the general to repeat to him those parts of his instructions which he has not sufficiently comprehended, compares his map with that of the general; corrects his own, if necessary; sets his watch to the correct time; and then settles as to the frequency of the reports which he is to furnish.

Q. If the general leave it discretionary with him to furnish reports according as he has opportunity?

A. Then he makes them frequently, sometimes in writing, sometimes verbally; but these last he always transmits by officers, or intelligent non-commissioned officers, having first satisfied himself, by making his messengers repeat them twice over, that they will be delivered literally and faithfully.

"I am arrived at * * * *.—The enemy shews himself in strength—he is in position; his position is a strong one; he has infantry and guns.—I require infantry.—Ought I to hold my ground or retire?—I am outflanked on my left, and forced to make a retrograde movement.—My losses are heavy.—I have taken up a position at the ravine of * * *.—The enemy has halted.—He is causing his infantry to retire; this is a *ruse*.—Numerous columns are marching in the direction of * * * *.* They are composed entirely of cavalry.—The hussars and dragoons, who shewed front to me, have been replaced by the cuirass-

siers of * * * and the hussars of * * *.—The bridges of the river * * * are broken down. It will take me three hours to repair them. I have captured from the enemy two hundred men and a gun.—He has made a false manœuvre.—He is in confusion.—He has abandoned some carriages.—The enemy is in full retreat; I am following in hot pursuit.—He will cause me to have a long chace this evening.—The roads that I am taking are too bad to allow of your bringing your artillery along them with any regard to prudence. I have reconnoitred in all directions; there are no others, &c.” (See Reports.)

Q. If the army be in a foreign country?

A. The commandant of the advance guard ascertains, before commencing his march, whether there are any amongst his troopers, who speak the language of the country fluently; if there are not, he gets several of these in addition to his detachment, and keeps them near his person.

Q. What does he next do?

A. He makes a rapid inspection of his detachment; satisfies himself that it is in good order; that it is in no want of ammunition, and, if possible, that it has food and forage; if he be unacquainted with the officers placed under his orders, he obtains a few verbal pieces of information regarding them direct from their commanding officers; he then posts these officers according as they best meet his requirements, and consequently in the most advantageous manner. (See Commanding officers.)

CHAPTER XX.

OF RECONNOISSANCES.

The basis of every military operation is, first of all, the knowledge of the ground under its double aspect of offensive and defensive, then that of the position, of the strength, and, if possible, of the intentions of the enemy.

It is with the view of firmly fixing this basis that officers are sent out to reconnoitre.

The commandant of a reconnaissance requires to possess a combination of every military quality. In fact the duty requires them all to be brought thoroughly into play.

Upon this unknown ground, where one is left to himself, he must be self sufficient, and find, in his own powers, resources that will correspond with the weight of his responsibility, and the relative importance of the duty on which he is sent.

On this duty, the point is not only to see, but to see properly, in order not to furnish false intelligence to the main body which will draw its conclusions from the report which you make to it.

In order to see, you must reach the spot unsupported, for all around you is hostile, and interested in your destruction : you must afterwards return without having allowed the enemy to rush upon you, or make a prisoner of you.

Allow yourself to be made a prisoner of ! horrible thought ! is not disgrace attached to it, and how much more poignant will be this disgrace, if the commandant of a reconnaissance has reason to believe that it is not only for the few men under his immediate command that he is answerable, but also for those composing the brigade, the division, the main body, whom his reconnaissance should give intelligence to—should protect !

The science of the retreat of a reconnoitring party consists first in escaping the eye of the enemy ; but, if it be impossible to deceive his lynx's eye, and to prevent a pursuit, the science then consists in having so well studied the features of the ground, on the way thither, by the eye, by information acquired, and by ana-

logy, in having so correctly estimated his dispositions, and the probable spots where he will post troops to bar the way against it, in following the roads which lead towards the attacking party, or narrow the front of his attack, so as to render it equal to that of the defence. If, in spite of these precautions, the reconnoitring party be cut off, after having exhausted all the resources of skill, it ^{will} have recourse to main force. This will not fail in the hour of trial if every trooper be thoroughly impressed with one grand truth ; viz. that a trooper can pass in every direction in which he is determined to proceed.

The first care of the commandant of a reconnaissance then ought to be to estimate the powers of his detachment ; to husband them, to have them available at the proper time, and thus to have them, as far as possible, completely at his disposal.

I repeat it, the trooper is entirely dependent upon the powers of his horse : if they are all expended in an hour, what remains behind ? And the small quantity, that prudence may have husbanded, may save a man's life and gain for him the cross of honor.

Let a reconnoitring officer be more thoughtful than any other. Let a reconnaissance, which has a long road to travel, and is not pressed for time, calculate its powers rigidly, compare them with, and adapt them to, the exigencies of the service on which it is despatched, and not expend more of them at a time than is absolutely necessary.

Let it not flounder in soft soils, which fatigue the horses ; let it not increase its pace except when necessary, for the first and paramount necessity of a reconnoitring trooper is a good horse in good condition.

Let every movement be guided by a power of reflection, cool, judicious, and prompt. Let a most minute vigilance observe and correct every thing which may retard, embarrass, or interfere with, the movements, and thereby remove the cause of useless dangers.

I have said that the commandant of a reconnaissance requires to combine in himself all the military qualifications of a light trooper ; nearly every chapter then of this work ought to be consulted by the officer entrusted with this duty.

As to the topographical portion of this service, I cannot do better than to give a summary of it by quoting the text of general *La Roche Aymon*.

"Behold summed up," says the general, "the principal points to be observed in objects either natural or accidental which go to make up the localities of a ground."

"WOODS."

"Their nature, their extent, the description of soil on which they grow; if they are interlaced, the way in which they stand with reference to the road which we have taken to reach them.....; whether there are any villages in the neighborhood; whether several roads pass through them, or intersect each other within them; whither they lead, and whence they issue."

"MOUNTAINS."

"Their nature, wooded or otherwise, stony, covered with soil, or rocky; whether they command the road in advance, or on what side: whether their slope is gentle or rapid; whether the road, by which you reach them, leads straight up, or winds along the flanks of the ascent; whether on the top the plateau is a table-land; whether it is wooded; what extent it possesses; whether its dip to the other side is very abrupt; whether it is commanded by higher mountains."

"RIVERS AND RIVULETS."

"Their width; their direction with reference to the road; the nature of the banks; which of the two commands the other; whether the river is dammed up; whether its course runs through meadows; whether the meadows are always practicable, or only at certain seasons of the year, in consequence of extreme cold or drought; what bridges or fords there may be within a league to the right and left; the names of the places or villages where they may be established; whether they are adapted to the passage of artillery."

"PLAINS."

"Their extent, as near as possible; the number of villages that can be seen, as near as may be; the nature of the ground, whether it consists simply of fields, or whether there are meadows, tanks, lakes, or simple plashes of water, sprinkled over them here and there. We know how important it is for a body of mounted men, without groping their way, to be able to move in every direction with the greatest speed, to know perfectly beforehand the ground which it takes up, and not to be checked in the mid-

dle of its manœuvres by unforeseen obstacles ;* it follows that the officers and non-commissioned officers, entrusted with a reconnoissance, should satisfy themselves as to how these fields are enclosed, and ascertain that they are not intersected, or divided off by too wide ditches.

*

"ROADS.

" Their nature, whether their direction is straight or serpentine ; what borders on them on either hand within gunshot range ; whether, by being shut in by gorges, they do not form hollow roads ; what breadth of front can pass along them.

"CITIES.'

" Their position ; the surrounding localities ; whether they have walls and gates ; if we can maintain ourselves in them, and establish a garrison ; what roads abut upon them.

"TOWNS AND VILLAGES.

" Their situation ; the surrounding localities ; the position of the houses ; whether they are divided by gardens ; whether the gardens are surrounded by hedges, walls, barriers ; how many strong built houses are therein, and their situation, as well as that of the church and burial ground ; whether the burial ground is walled in ; finally, whether a river, or a rivulet, flows through these cities, towns, and villages, or winds round them."

War has its routines also, despite of the danger associated with them, despite of the terrible and daily demonstrations of their unsoundness, and of their fatal consequences. Wherefore ? I can tell too well.

The older armies grow, the greater is the sway of routine, or daily habit. If this were the case when the sound of the cannon was heard daily, when daily instruction was afforded, what must it be after fifteen years of peace, with troopers of all ranks, either too old, or too young.

Routine is the traditional science of mediocre intellects. The axioms, which it deduces from an unreflecting experience, are listened to with admiration by those who have not seen any thing ; for these men relate to the young hands a great deal more than

* A painful illustration of this truth was afforded by the entanglement of the 14th Light Dragoons in the nullah at Ramnuggur on the 22nd Nov. 1848 owing to the want of a previous reconnaissance, or rather to the conversion of a reconnaissance into a charge.—TRANSLATOR.

these can discover in their books, and a respectful ear is bent, owing to the dignity and gravity which their words assume in issuing from a mouth overshadowed by huge white moustachios.

Let us make a difference then between traditions and routines ; and, putting these last on one side, eagerly seize the practical instruction afforded by the others.

An error of routine that I have but too often seen committed in our army, notwithstanding the frequent and severe lessons which it has cost us, is the belief that it is impossible to reconnoitre without attacking.

This ridiculously false principle naturally draws in its train a series of consequences as false as itself. A reconnoissance would invariably set out unnecessarily strong, thereby entailing considerable extra fatigue on the regiments ; then difficulties, and retardation of mobility ; then, lastly, confidence in its own strength, unweaving self-esteem and, in forgetfulness of its peculiar object, an unequal combat, an embarrassed retreat, and complete overthrow.

Several of our reconnoissances were made on a wrong principle ; for they were too strong to see without being themselves perceived ; and yet too weak either to make or to sustain an attack.

Reconnoissances ought not to be made with too strong a party, except in one particular case ; viz, that in which they are intended to make an attack : then, their numerical strength ought to be as respectable as possible.

In every other case, they ought to be composed only of a few intelligent well mounted men who can proceed any where, can conceal themselves behind a rock or a few bushes, and, if they are pursued, have no occasion to wait, for they have longer legs than their pursuers. Let us then lay it down as a rule that *to reconnoitre does not imply to attack.*

A reconnoissance sometimes attacks, but it is only in order to reconnoitre the better. The attack then is not its object, but only one of its means.

This means must never be employed except you cannot perform the duty entrusted to you without it.

If then, although at the head of two hundred sabres, you can better see the enemy with two troopers concealed at the angle of

a wood than with all your force engaged, be on your guard against preferring the second means to the first.

The best commanded reconnaissance is that which brings all its horses and men in good condition ; and not that which, forgetting its object, employs force instead of address ; the officer commanding this last is, in my opinion, deeply culpable, and ought to be exemplarily punished.

The Russian light cavalry does not act as we do. In the Russian campaign, we formed the advance guard, and marched from Orcha upon Witebsk. On arriving at Babinowitschi, near a wood, we perceived a cossack traversing a glade ; we halted and formed, we detached a squadron towards the glade, and succeeded in capturing two cossacks, whose horses were exhausted with fatigue : three others escaped. We remained a long time in position, searched the country carefully, and found nobody. The prisoners were questioned, and they replied that they had been sent from Witebsk, five in number, to reconnoitre as far as Orcha (twenty leagues) ; that they had followed us since the morning, and had not lost sight of a single movement of ours ; the three other cossacks regained their own troops, to whom they gave all the information, and, some days afterwards, at this same Babino-witschi, a reconnoitring party from our regiment, consisting of two officers and fifty men, was carried off bodily by the Russians.

A second fault of routine, that I have seen committed but too often in our army, related to the regularity of the numerical strength, and of the hours of departure of the detachments sent to reconnoitre. When daily at the same hour and taking the same roads, and going to the same places, reconnoissances set out composed of the same number of men, their fate is easily foreseen.

Reconnoissances ought, as much as possible, to march unperceived ; to this end, in places which afford cover, their pace is slower than in an open plain, wherein their march is no longer a mystery. It is necessary then, when there is any thing to apprehend, that they endeavor to cross these plains during the night, or that, in the day time, they pass over them at the trot, in order to escape observation as soon as possible. They ought to fear their presence being communicated to the enemy by the peasantry. In order to diminish this danger as much as possible, let them

avoid, as far as they can, those villages which it is useless for them to pass through and reconnoitre: to this end they should carry along with them whatever they require to sustain man and beast; they should make their halts in solitary and concealed spots, from which they can command an extensive view, and in which a few men, dismounted and judiciously posted, will be sufficient to protect them.

If reconnoitring parties halt in a village, let them prudently search them before entering them, and let them establish flying vedettes outside, and on its flanks, to seize the peasants who might escape and convey intelligence to the enemy. Let these halts continue no longer than is necessary to reconnoitre the places, procure guides and useful information, and to forage.

If the village lie in an open plain, the detachment will be collected at the base of the steeple, where it can unbridle and forage. A sentry will be posted in the belfry to give warning of the approach of the enemy; this sentinel, and the two or three flying vedettes, of whom I have spoken above, will suffice to guard the detachment securely. When night falls, the detachment will leave the place, and, if interested in misleading as to its route, it will issue from the place in the opposite direction from the road which it intends to follow, and will regain the right direction by a circuitous route. Its rear guard will be on the look out that it is not followed.

If the reconnaissance is retreating, pursued by the enemy, and is compelled to traverse a village or a town, it will do so rapidly.

If the reconnaissance have reason to apprehend a night surprise in its bivouac, it will light its fires, and, then proceeding to a distance, it will re-establish itself without fires, and without noise at some hundred toises* to the rear of the abandoned position.

If the reconnaissance be marching by night, and at a distance from the enemy, it will endeavor to mount its guide upon a white horse, which will distinguish him, and which will be more readily perceived than any other, however dark the night may be.

* A French toise is somewhat more than six feet English, being 76·73 inches.—Translator.

If at night a reconnoissance be in the vicinity of the enemy and it wishes to conceal its march from him, it will take care not to put white horses in the advance guard.

If it be proceeding along a paved road, it will proceed upon the beaten foot paths alongside of it, to deaden the sound of the horses' feet, which will otherwise be heard to a very great distance.

If it be near the enemy, it will interdict the use of the pipe to the men, which would throw light upon their countenances and cause them to be discovered.

If, finally, when near the enemy, it wishes to mark him well, it will turn his rear ; then, halting the main body, will detach only two or three intelligent men, who, in the manner of sharp-shooters, will creep along in the most profound silence, and, as it were, from shadow to shadow, to conceal their approach. Arrived at their point of observation, they will note every thing with the greatest attention and return to deliver their report, observing the same precautions on their return as they did on proceeding.

If the commandant of a reconnoissance, after having duly estimated the enemy, can, without risk, make a few prisoners, or throw his camp into confusion, he will do so, provided he had discretionary power entrusted to him when he left.

In 1814, General Maison gave orders to an officer of the red lancers of the imperial guard to set out from Lisle at the head of a hundred sabres to reconnoitre the enemy in Menin, and to bring him back the most circumstantial information. This officer set out two hours after noon ; the sun was setting, when he perceived the steeples of Menin ; he had concealed the march of his detachment, which he placed in ambush at half a league from the town. Night having fallen, and it being a most pitch dark one into the bargain, he approached the town with a section, avoiding the paved roads ; then concealing this section within musquet shot, and gliding into the suburb with an officer, non-commissioned officer, and a trumpeter, he alighted, had his horse held, and concealed himself in a ditch near the bridge. The reconnoitring parties of the enemy returned in succession, and passed close by him. Notwithstanding the deep obscurity of the night, their outlines fell with sufficient distinctness on the sky to enable him to count them man by

man, and to distinguish the different cuts of their uniforms. Furnished with these notes, which gave him data as to the number and composition of the enemy's troops, certain that the whole of the reconnoitring parties had returned, and that he had nothing to apprehend from them on this side of the river, he sent to summon ten of his lancers. A peasant, coming out of a house, and passing close to him, perceived him, and would have called out: he caused him to be seized by the non-commissioned officer, who put a pistol to his breast, and conducted him to the rear: the lancers arrived silently, at the very instant that the enemy's post was preparing to lower the draw-bridge. At their head, he charged the too confiding post, made prisoners of eighteen mounted troopers, and immediately effected a rapid retreat.

He brought back authentic intelligence to the general, and every one of his men: not one of them had even been wounded.

In 1809, General *Curély*, then a captain, and aid-de-camp along with myself to General *Ed. Colbert*, was directed to reconnoitre the march of the Austrian army, which was retiring and offering front to our army of *Italy*. At the head of a hundred troopers, he preceded our division by ten leagues, turned the Austrian army, and kept in company with its rear so secretly that at night-fall he found himself concealed in a wood three-quarters of a league in rear of the village in which the general staff of the Archduke had taken up their quarters. A wide dusty plain intervened between him and this village. Two or three Hungarian plunderers, whom he seized, gave him some useful information. A large herd of cattle, returning from the fields and proceeding to the village, passed close to his ambuscade; he seized the herdsmen, and folded the herd in the wood until the night closed in; then making it resume its route, and placing in its centre his troopers dismounted and leading their horses, he thus directed his steps to the village under cover of the heavy cloud of dust that was raised. The night, the dust, the fatigue of the enemy, the little solicitude that the Austrians had with reference to the direction from which the herd was approaching, so fully served the designs of *Curély*, that he penetrated even as far as the village square, where with his own hand he blew out the brains of one of the sentries of the Archduke, commanding in chief. At this signal, his troopers remounted, used their sabres for a few minutes, and, profiting by the astonishment or the stupor of

the enemy, made their way out of the village, and rejoined *Colbert's* brigade the next morning, without having lost either a single man or a single horse. The position of the general staff of the Austrians having been thus clearly ascertained, afforded sure indications of that of our army of *Italy*, which we fell in with again two days afterwards, and in the advance guard of which we fought at Karako, at Pappa, and at Raab.

After these two examples, the historical exactness of which I can assure you of, I think that it would be useful to draw up one in a more detailed fashion, and which we will follow out according to the little plan annexed to the chapter on Topography.

Captain * * * *, sent to the divisional staff, receives the following order :

“ Captain * * * * will set out immediately at the head of a hundred chasseurs of the 8th Regiment.

“ He will reconnoitre the little town of Neustadt.

“ If the enemy be in possession of it, he will endeavor to bring back some prisoners.

“ He will bring back intelligence of the Prussian main body, which ought to have arrived near this town.

“ He will carefully examine the country that he passes through, and will bring me a statement of its general features, the description and condition of the roads, bridges, water courses, &c.

“ He will endeavor to rejoin the day after to-morrow before ten o'clock in the morning. (Signed) General ——. &c.

Bivouac at Grosturm,
this 18th day of June 1832, 5 A. M.”

The captain, after having received this order from the general's hands, makes a calculation, on the map of the general staff, of the ground that he will have to traverse.

He then takes command of the detachment, which the regimental adjutant has had formed up ready for him.

He inspects this detachment, assures himself that the pouches have their proper allotment of ammunition ; that the arms are in good order ; that the horses are properly shod ; that the haversacks contain bread and oats ; and then breaks off in double file.

He halts in person and makes his detachment file past him.

Three horses are lame; two are too weak to keep up; others are known to be addicted to neighing; dogs are accompanying the detachment; all these he sends back, and leaves them at the bivouac: once beyond the advance posts and the line of patroles, he halts, tightens the girths of the horses; detaches the banderolles from the lances; puts the carbines in their swivels; orders the shabracks to be tucked up, and the cloaks folded across; he places his Alsatiens at the head of the column, desiring them to speak nothing but German. If, amongst his officers, there be one from that province, he makes him proceed alongside of himself, and hands over the section which he commands to a non-commissioned officer.

The next senior officer to the commandant marches in rear of the column, so that it may be completely and correctly formed.

The advance guard is composed of ten men commanded by an Alsatian non-commissioned officer. It marches a hundred paces in advance.

The country is open, the ground wet; it is requisite to march rapidly; flankers are not sent out, as it would break down their horses, and retard the march, whilst nothing would be gained by it.

The rear guard, composed of a corporal and four men, marches fifty paces in rear of the column.

The advance guard appear to hesitate; the captain forms four deep, opens out his sections to distances of a hundred paces from each other, and on the right side of the road, with their right to the ditch. He halts his columns, and sends to enquire into the cause of the halt of the advance guard; it is on account of the appearance of troopers; they have been recognised: it is one of our own reconnoitring parties returning.

He puts questions to its commandant, but he has been in a different direction from that in which he himself is proceeding, and knows nothing except that patroles of the enemy, of from twelve to twenty five strong, have appeared upon the Ingolsheim road, about a league from where he now is.

He closes up his columns again, and continues his route. The ground changes in its features; it becomes broken; a few low hills rise on the right, and command the plain; the captain

detaches three men well mounted, who follow their crests, and flank the detachment.

After having marched two hours, he arrives at the termination of the plateau. A rich and broad valley is spread at his feet, he perceives a place where four roads meet; the first to the right is a firm, stony one; that ought to be the one that leads to Ingolsheim. The second is only a small natural one, which winds along the mountain, and appears to trend, as it crosses the plain, towards the woods which border and hem in the valley to the right. The third is a stony road corresponding to that of Ingolsheim; it ought to lead to Neustadt by Berndorf.

The captain, referring to his map, is convinced that he is not mistaken. In fact it lays down the termination of the table land and the meeting of the four roads at two leagues distant. He has been marching two hours. It (his map) lays down Berndorf as at two leagues distance in the valley in front, and to the left of the termination of the plateau, and in that direction a village can be clearly made out.

In order to be more certain on the subject, he dispatches his Alsatian officer, followed by a couple of troopers from the same province, to put some questions to a peasant, who is at work a hundred yards off. The officer says, in good set German, to this peasant: "Holloa, friend! have you seen any of our troops?"—"Who are your troops?"—"Oh! faith, our brethren, the Prussians."—"No, but I am aware that some of them have arrived at Neustadt and Baumdorf."—"And the French?" "Ah! the beggarly, rascals! it is said, that there are 10,000 of their cavalry at Grosthurm."—"As many as that?" "Yes, at the very least."—"Ah! well, we are about to rejoin our comrades at Neustadt. How should we get there?"—"Go along that road."—"This one?"—"No, that leads to Ingolsheim."—"This one, then?" "No, that is only a bye road which skirts the woods in the neighborhood of Baumdorf; but take that beaten road, which will lead you to that village, which you see lying down yonder." "Yes, I see it, close to that mountain."—"No, that is Bonn; but that one more to the right in the valley."—"There?"—"Yes, that is Berndorf."—"Is it far off?"—"A couple of leagues."—"And how far is it from Berndorf to Neustadt?"—"Five hours on horseback will take you thither."—"Thank you, my man; good day."

The captain then was correct in his supposition. He reflects ; the enemy is in his neighbourhood ; he must have some outposts in the valley ; it is broad daylight ; the march of the detachment cannot escape his notice, especially if it follow the high road ; the horses will soon require rest ; the screen of wood on his right, and which follows the valley and continues as far as the Baundorf road, may conceal his route ; he does not hesitate.

Turning to the right by the bye road, he slowly descends the mountain, and, crossing the plain at the trot, he gains the wood.

He follows the paths which he judges lead in the direction of the way that he should follow. His compass assists him, and, in default of that, the sun. The valley, which he perceives on his left, through the different openings, prevents his dangerously wandering to the right. His march is conducted in silence. His men speak below their breath ; they so arrange their arms that they shall not clang against the brass work of their accoutrements, their stirrup irons, or spurs, &c. ; here, the difficulties of the ground compel the detachment to dismount ; but they subsequently remount and increase their speed. These movements are done without word of command ; the example of the leader is the simple rule.

The column marches as closely locked up as possible ; the advance and rear guards march closer to the main body.

Five hours have elapsed since it quitted Grosthurm ; the spot, where it now is, is a wilderness, and the shade of the wood is thick. The captain quits the path, and makes the detachment enter a glade well surrounded with high bushes, and dismount.

Sentries are posted in different directions, so as to be able to see every thing and remain invisible. One half of the horses are unbridled and fastened to the trees : they eat oats, grass, or the leaves which they can pick up without straying from where they are picketed, the men eat their breakfasts in silence, with their bridle on their arm, and in front of their horses.

The captain has not neglected on his march to make observations which will be of use to him ; if, not being able to carry out his plans, he be obliged to return by the same road : he has traced a rough sketch upon his *calpin* ;* and the twigs broken off at the

* The waste leather used as patches for rifle balls. (Trans.)

entrance of the different roads, and the various bearings of localities imprinted on his memory are so many finger posts to guide him in his return.

It is one o'clock ; he remounts, and resumes his march. The ground is difficult, and by six in the evening the horses are knocked up, when he comes suddenly upon the Baundorf road : what must the captain do now ?

He is still two leagues from Neustadt : he is ignorant whether the enemy is in this town and whether he is in force. The detachment is worn out, and if he be obliged to make good his retreat under the fire of cavalry which has rested and is fresh, no doubt but that his casualties will be numerous : moreover, if he march directly upon Neustadt, he will arrive at night-fall, a time when cavalry is always upon the *qui vive* : if he remain where he is, without resting and feeding his horses, the chances will not be a whit more in his favor.

He therefore conceals his party close to the road, a traveller passes by, he causes him to be seized, and warns him that, if he cries out, he will shoot him like a dog.

" You are coming from Neustadt ?"—" Yes."—" Are the Prussians there ?"—" Yes."—" Cavalry or infantry ?"—" Cavalry."—" How strong ?"—" I don't know."—" Is there a village near this ?"—" One, about a quarter of a league off."—" And solitary farm houses ?"—" Several."—" Do you know them ?"—" Yes."—" How are their buildings disposed, and where are they situated ?"—" One close to the village—it is of a superior class, its buildings are extensive, and the access to it easy, for it has not an enclosed court-yard."—" And the other ?"—" It is three-quarters of a league from the village, and half a league from this, situated upon the borders of the wood and the marsh on the Neustadt side : it is not equal to the first ; it has a court-yard surrounded by high walls, and secured by a heavy gate ; it is about a league from Neustadt and to its right."—" Lead us to this last."

The captain then, after having made sure that there is no one passing along the road, causes it to be rapidly traversed ; and, plunging again into the forest, he follows his guide, whom he has had fastened by one arm, and committed to the keeping of a corporal and non-commissioned officer.

He halts two hundred yards from the farm, reconnoitres its approaches, posts men quietly around it, and, resuming his march, enters the court-yard.

A peasant, in the act of escaping, is brought back by one of the troopers, who form the *cordon* around the house. This peasant, the whole of the farm people, and the guide, are locked up in a cellar, at the door of which a sentry is posted. The gates and doors of the farm are closed, and in-lying sentries planted at those which open upon the country. Four men, concealed from sight, are placed at those windows which command an extensive view from each of the four faces of the house. The horses are unbridled and fed ; the men sup and go to sleep. It is night. No light is allowed to fall upon the windows ; silence reigns throughout the detachment.

A patrole of five Prussian troopers passes before the house ; the men placed at the windows have given notice of its approach. Is it an advance guard ? The men bridle quietly, are mounted, and drawn up in the court, sword in hand. Orders are issued, in case the enemy should be in force, and wish to enter, to throw open the gates, make a vigorous sortie, and regain the road by which we came.

The patrole is not followed by any other body. Shall we make prisoners of it ? No, because shots may be discharged, and convey intelligence far and wide. It desires to enter the farm. It knocks at the gate. No answer is given—it becomes more urgent — the Alsatian officer replies to it, counterfeiting as well as he can the *patois* of the country, that he had rather not open the gate, and that, if the patrole insists upon his doing so, he will go and lodge a complaint the next morning, against its officers. It takes its departure, grumbling and swearing.

The troopers dismount, unbridle, and feed, their horses.

The captain interrogates, one after the other and individually, the inhabitants of the farm, after having warned them that it is as much as their lives are worth, if they attempt to give aⁿ evasive reply.

He learns that one hundred Prussian hussars are in Neustadt ; that they have arrived from Freythal, a town formerly fortified, and still surrounded with a rampart, and eight leagues off ; that

they bivouac in the rear of the town ; that they have a main-guard of twelve men, on the Baundorf road, and an outpost of five men upon that of Wèg ; that they send out patrols in the direction of Bonn, Berndorf, and Baundorf ; that these patroles consist of from twelve to fifteen men ; that they generally set out at four in the morning and five in the evening, and, that they return two or three hours after the time of their leaving.

At two o'clock in the morning the captain directs the horses to be bridled, ascertains that they are properly saddled, and well girthed ; that the haversacks contain provisions and one feed of corn ; that trusses of forage, well tied together, are fastened to the portmanteaus ; and then, setting at liberty only one peasant, whom he mounts on one of the farm horses, and observing with reference to him the rules laid down in the chapter on guides, he places him at the head of the detachment, and posts himself in ambuscade in the little wood situated at a quarter of a league in rear of Neustadt.

His men dismount, hold their horses by the bridle, and maintain the most profound silence.

At five o'clock in the morning, that is to say, an hour after the presumed moment of the departure of the reconnoitring parties of the enemy, the detachment mounts, and approaches Neustadt with the utmost possible secrecy ; then, as soon as there is a chance of his being discovered, he breaks into a full trot, draws swords, dashes into a gallop, charges the bivouac, and makes men and horses prisoners.

The captain seizes the letters in the post office, takes prisoner two men of note in the town, one of whom is the post master and the other, the burgomaster. He mounts them upon captured horses, and, quitting the place at full-trot by the Baundorf road, he does not resume the walk, until he has turned to the right upon that of Baundorf. The prisoners, unarmed, mounted upon captured horses, which are led by troopers, march in the centre of the column. The advance guard, consisting of twelve men and an officer goes one hundred and fifty paces in advance. The rear guard, composed of twenty-five men and an officer, follows at the same distance.

The captain carefully examines the road which he is travelling, and regarding which he ought to bring back the most accurate in-

formation to the general. He only halts a few minutes at Baum-dorf to procure a guide there and to take notes ; then, not caring to pass again the meeting of the four cross roads, which must of necessity be a central point for the reconnoissances of the enemy to meet at, he takes a neighboring road to the right, crosses the plain and ascends the mountain.

Arrived at its top, he establishes his people in a place distant from the high way, behind some rising grounds, which conceal his party from view from the direction of Ingolsheim, and, planting concealed sentinels who can command a view of the plain and the valley, he gives fodder to his horses. Meanwhile, he interrogates his prisoners, writes his reports which will be found in the next chapter, and finishes the sketch, which is to be seen annexed to the chapter on topography. • • •

When the horses have been fed, he makes the men mount, and, by a circuit, regains the Grossthurm road. At a quarter of a league from the bivouac, he directs the banderoles to be again attached to the lances of his detachment, then without making any alteration in his order of march he replies to the challenge of our outposts, and returns to the head quarters of the regiment. There, he presents the captured horses to the colonel, and carries the prisoners, dismounted, to the general, to whom he makes his report.

CHAPTER XXI.

OF REPORTS.

There are two descriptions of reports ; verbal and written ones.

The first are made on the return of a reconnoitring party, or of one despatched on special duty, and are entrusted to an officer or non-commissioned officer, detached from the advance guard. They ought to be curt, and are in general insufficient for missions of importance : for this reason, it is useful that written reports should accompany them, to which they form a happy accessory.

I am aware that it is difficult to obtain written reports from officers, because, before the war, they were not broken in to the duty by a previous education ; this was a real and injurious misdirection of military studies. In war, the incorrectness or slovenliness in writing and despatching his report is a fault of magnitude, in an officer, which should be severely punished.

Reports are as indispensable to the commander-in-chief, as the map of the country that his operations are carried over. It is by them that he obtains clear information : without them, he cannot arrange his plans.

Q. What are the indispensable qualities of a report ?

A. A scrupulous exactness as to the facts contained in it ; simplicity ; lucidity in drawing it up ; neat handwriting ; correctness in spelling proper names.

Q. Ought a report never to contain any facts but those that are thoroughly within our own knowledge ?

A. It may contain one part official, and another non-official ; but they ought to be kept quite distinct ; thus, for instance, we must not say :

“ I have arrived at the village of Hœvenstein ; the enemy appeared there in the morning, but has retired upon the town of Greiffenstein,” but rather :

“ I arrived at half past nine at night at the village of Hœvenstein, where I did not find the enemy. The burgomaster inform-

ed me, and individual reports from several of the inhabitants confirmed his statement, that twenty-five Austrian hulans (*kurtka** green, red and gold, and yellow *schapska**), fifty cuirassiers, (uniform white, facings amaranth color), and fifty light horse (uniform white, facings sky blue), had arrived at Hœvenstein at 7 o'clock this morning; that they had refreshed themselves, and then retired upon Greiffenstein.

"The uniforms mentioned lead me to suppose that the hulans belong to the Merfeld regiment, the cuirassiers to the Albert one, and the light cavalry to that of Colloredo. Greiffenstein appears to me to be too far distant for them to have retired upon it.

"More recent intelligence induces me to imagine that, about a league hence, this body has quitted the road leading to that town, to throw itself into Kirstein, where it is said that a division of Austrian cavalry is posted. I shall only allow a few hours of rest, which my horses absolutely require, and shall then proceed in that direction to ascertain the fact."

In this example, the positive part, which is the arrival of the detachment at Hœvenstein, is *affirmed*; that relative to the departure of the Austrian cavalry is given out as *an on dit*, which may be relied on; and that regarding the road taken by this cavalry in retiring is a *supposition* of the officer commanding the reconnoissance, to which the general will attach more or less weight, according to the amount of confidence which he places in this officer, and the comparison of the reports that he may have received from other quarters.

Q. Ought reports to be made frequently ?

A. The frequency of reports ought to be dependent upon the usefulness of the communications which we have to make, and governed by the difficulty which we may experience in conveying them: thus an advance, or rear, guard ought to make more frequent reports than a reconnoissance, because their communication with the army is more easily maintained, and the intelligence which they convey has a more direct and more urgent bearing: often, even, a reconnoissance ought not to forward reports. The

* These portions of uniform being peculiar to the hulans, we have no corresponding English terms for them that we are aware of. (Trans.)

orders, which it will have received previous to starting, will be its guide in this respect.

Q. What precautions do you take, when you transmit a report?

A. If I am at a distance from the division, or the brigade, and apprehend that the enemy may capture my messenger, I give to the individual, whom I have selected amongst the intelligent and well mounted men, an outline of the ground that he has to travel over. I point out to him on this sketch the dangerous spots and which he ought to avoid; then to my written report I add verbal details, which he is to repeat to the officer to whom my communication is addressed.

In order to be certain that he has thoroughly understood me, I make him repeat twice over what I have just told him, and desire him to say nothing beyond the message entrusted to him.

My report is written small upon a scrap of paper, which he puts in his glove. If the enemy attack him, and he cannot escape, he has orders to swallow this paper. A sure place to keep a report in is the bore of his pistol; there rolled up into a ball, and preserved from injury by being wrapped up in a scrap of paper, it is rammed home in the shape of wadding, and, if the bearer perceives that he cannot save it, he effectually destroys it, by discharging his pistol at the last extremity.

Often, when there are strong reasons for apprehending that his messenger will be cut off by the enemy, the officer causes him to be escorted by a party to a certain distance; but he must be chary of these escorts, because they weaken the reconnoissance and retard its progress.

If more than an usual interest attaches to the safe arrival of the report, and apprehensions are entertained of its being intercepted, it is made out in duplicate, and confided to two men, who take different roads.

Q. Ought this report to be very circumstantial?

A. Yes; and to that end it is necessary to take exactly and progressively *en route*, the notes which are required to form its basis; thus nothing is suffered to escape; every thing is more generally exact, and the memory, thus assisted, is not obliged to make an effort to give an approximation, when it recalls its scattered reminiscences at a later period.

It is not necessary, however, that a report should contain idle things, the knowledge of which is useless to the commander-in-chief. Often an officer writes a regular history of his reconnoissance; enters into a detailed account of his halts, his anxieties, his marches, his countermarches, &c.: all this is ink and time thrown away. What the chief requires is the results of his reconnoissance, in the sense of the accomplishment of the orders given to him.

*Q. Write me the report of the reconnaissance made in the preceding chapter by Captain * * * *.*

“ BIVOUAC DE GROSSTHURM,

19th June, 1832.

“ In obedience to the annexed order, I set out yesterday, at five o'clock in the morning, from the bivouac of Grossthurm, at the head of a detachment of a hundred chasseurs of the regiment; proceeding along the road leading from Berndorf to Neustadt. At three o'clock in the morning (*i. e.* of the next day,) I had got to the rear of this town. By five, three officers, four Prussian hussars of the * * * and * * * regiments, the burgomaster, and postmaster of Neustadt were in my hands. Ten of the enemy's hussars fell on the field.

“ According to the report of the prisoners, other information, which I have picked up from the inhabitants, and the contents of the letters seized, and which I subjoin to this report of mine, marked by inverted commas, and numbered 1, 2, 3, 4, 5, 6, and 7, it appears certain that five thousand infantry, fifteen hundred cavalry, and six guns, arrived the day before yesterday at Freythal, which they occupy, being commanded by General * * * *. The same reports declare, 1. That the strong infantry division of two brigades, commanded by Generals * * * * and * * * *, is composed of the 2nd, 8th, and 16th regiments of the line, and of the 4th militia regiment. The cavalry brigade, commanded by General * * * * is formed of the brown hussars (*ex* Schmelpheninch), at present commanded by * * *, of the black hussars. (*ex* La Roche Aymon) at present commanded by * * * *, and of dragoons, recently raised, commanded by * * *.

II. That a thousand infantry of the 6th regiment, and two hundred troopers of the 2nd *towagis*, arrived the day before yesterday at Baumdorf, and threw out reconnoissances of from fifteen to twenty-five men on the Ingolsheim road.

III. That the artillery teams are bad: that it has left several of its carriages behind in its last marches.

IV. That the infantry is a fine body, but that it reckons in its ranks about six hundred Poles from the duchy of Posen, and eight hundred men from the Rhenish provinces.

V. That the cavalry is well mounted, but worn out with fatigue; that the officers in command are not well liked by their men, and that there have been slight mutinies, in which young non-commissioned officers, ex-students from Halle and Gottingen, have taken a prominent part.

VI. "That infantry was expected at Neustadt where a requisition for twelve thousand rations on their account had been made.

"The annexed sketch shows the observations that I have been able to make upon the bearings of the different places, and the road that I have taken.

"The table land, which takes its rise from Grossthurm, and extends, (of an equal length and breadth) as far as two leagues from this village, is large and open. Its apparent development is about a league; a few clumps of trees, and slight elevations, are to be seen at its north-eastern extremity. It is nearly all covered with crops of barley, oats, and amel corn. Artillery can traverse it in any direction.

"The road divides it into two equal parts; this road is twenty-five feet broad, hard, and in tolerably good order. It is every where practicable and suited for carriages.

• "At the place, where the cross roads meet, the plateau overlooks the valley of Neustadt for about two hundred feet, and then divides in a horse shoe shape so as to surround the valley on the south-west and east. Its western portion is very nearly level as far as Neustadt, and is only broken in one part by the ravine through which the torrent of *Iff* runs. This break is about a quarter of a

league in length. Its eastern part dips down insensibly as far as the torrent of Ill, above, and to the north-west of, Neustadt.

"Three roads meet at the cross road situated at the extremity of the plateau; the first to the right, that of Ingolsheim, runs to the south-east; it is firm and appears in good repair.

"The second is a natural pathway, narrow and of no great length; its direction is north-easterly, and it enters the woods, which shut in the valley to the right.

"The third, that of Neustadt by Berndorf, runs northerly, and may be considered as the continuation of the roads of Grossthurn and Ingolsheim; it is well beaten, thirty feet wide, and kept in capital order as far as Neustadt.

"From the meeting of the cross roads the whole of the valley is visible. Its width is about two leagues; it stretches from north to south and is intersected diagonally from the south-west to the north-east by the torrent of Ill, and divided into two equal parts by the Neustadt road.

"Taking this junction of the roads for our point of departure.

"At two and a half leagues to the northward lies Berndorf.

"At three and a half leagues to the north-east is Bonn.

"At six leagues to the northward, and in a straight line with Berndorf, is Neustadt.

"The valley is rich, flat, and level: the crops upon it are various. The woods, which shut it in on the right, extend, it is said, as far as Ingolsheim and Baumdorf; they are difficult for cavalry, and impracticable for artillery, being traversed only by foot-paths, and the soil being softened by numerous springs: in several places, they are high and thick, and form an excellent screen for masking every military movement: the plateau, upon which they are situated, overtops the valley by about two hundred feet. Towards the south it shelves down gradually, as far as the Baumdorf road, which, at this point of junction, is nearly on a level with the town of Neustadt.

The low hills, which close the valley in on the left, are covered with vines, all the way from Bonn to Neustadt; their elevation is pretty nearly from two hundred to two hundred and fifty feet

above the level of the valley ; their opposite slope, steep and rocky, is traversed only by village paths, impracticable for cavalry.

" On quitting the table land, the Neustadt road tips down into the valley by an inclination which may be estimated as nearly six inches in the yard : this road is good, well beaten, and reaches the bottom of the mountain by four zigzags.

" To the left, in the valley, are fields of wheat, which extend as far as the mountain, whose opposite side is covered with coppice woods. They are crossed by a natural road, which leads from Berndorf over the summit of the plateau. The furrows in these fields are deep, which renders it fatiguing for artillery or cavalry to cross them.

" On the right, there are different descriptions of cultivation, bordered with fruit trees, impracticable for artillery or cavalry ; but very favorable for masquing infantry riflemen.

" This state of things continues as far as Berndorf.

" Berndorf is a large village, containing about three hundred and ten souls ; its houses are wealthy farms, the granaries of which are well stored with grain and forage ; its horned cattle are estimated at a hundred and thirty ; sheep, five hundred ; and horses, seventy.

" The road narrows at first on entering the village ; it afterwards grows wider, and eventually winds round the burial ground, in the middle of which the church stands, and which is enclosed by walls breast high. This burial ground would form an excellent post for infantry.

" On quitting the village, we can see Bonn, a poor village, inhabited by vine dressers, situated about three-quarters of a league off on the torrent of Ill, and towards which a neighboring road leads, said to be practicable for carriages.

" On the right, a path, about a league and a quarter long, reaches the wood, after having crossed the plain, the description of cultivation of which is changed. From Berndorf to the causeway of Baumdorf, between the road, and the wood, there are now nothing but meadows, the half of which nearest the main road is firm ground, and the half towards the wood is marshy turf.

"The road continues to be good, and trends to the north-east, the fields, which border it on the left, extend towards a young wood, which is situated about half a league off, and which is separated from the mountain by the Ill. The soil of these fields, cultivated as corn fields, is firm; the furrows are shallow, and it is possible to deploy and manoeuvre upon them artillery and numerous battalions and squadrons.

"After having marched for four hours, we fall in with the causeway leading from Baumdorf to Neustadt and Wey upon which it falls in a straight direction. This causeway is thirty-five feet wide, hard, but kept in bad order.

"Turning to the left, and after an hour's march, we arrive at Neustadt. The Ill, which runs in front of the town, is a torrent about forty-five feet wide, its bottom is rocky, and it is said to be fordable at present from Bonn as far as Müllbeck, a village situated three leagues below Neustadt, and where it is said that there are flourishing mills stocked with flour. The Ill is crossed at Neustadt by a bridge of two arches; this bridge is of hewn stone, and strongly built.

"Neustadt is a small town of fifteen hundred souls, its streets are wide and badly paved; its houses are large and substantially built. Its suburbs consist of rich farms, well stocked, it is reported, with grain and forage; this town possesses a horse mail and a general post office. It is surrounded by gardens enclosed by wooden palings, which can easily be destroyed; further, it is open, and commanded in every direction; it is incapable of defence. Its inhabitants are said to entertain great animosity towards the French.

"Numerous flocks and herds belong to the town: their number is estimated at three hundred horned cattle, twelve hundred sheep, and two hundred horses; but the vicinity of the woods affords them easy and secure shelter, whenever the inhabitants may apprehend an attempt to carry them off.

"Neustadt is commanded on the west by a mountain called Grosskopf, distant a quarter of a league, the summit of which is barren and impracticable, and the base covered with vineyards, extending as far as Bonn.

" On the north-west stretches a valley which follows the high road to Wey ; on the north lies the great open road to Freyhall ; on the north-east are impracticable marshes, and the stream of the Ill ; on the east, the causeway of Baumdorf, which, for the distance of a league, runs alongside of the marshes abovementioned, and then enters the forest.

" Wey, a rich town containing twelve hundred inhabitants, lies, I am told, eight leagues to the north-east of Neustadt : the road leading thither is good, and, although of unequal levels, is easy for artillery.

" Freyhall, a town surrounded by a rampart, and containing a population of two thousand souls, lies to the north, and distant seven and a half leagues from Neustadt : the road leading thither is a made one, but in bad condition ; it passes through the two villages of Waldfelden and Rosenfelden ; the first, containing two hundred inhabitants, is situated five leagues from Neustadt upon the table land which overlooks the two valleys ; the second, with a population of three hundred, lies a league further on in the plain which is immediately before you come to Freyhall.

" To sum up ; the country, which I have passed over, is well adapted for military operations ; for its inequalities offer excellent positions, its plains admit of the deployment of all arms, and its high state of cultivation ensures abundant supplies to a large army for several days.

" I have to regret only the loss of one trooper, named Roch, of the 6th squadron, killed by a pistol shot on our entering Neustadt ; six others have been wounded, but not sufficiently severely to prevent their returning with me.

" It is my duty to bring particularly to the notice of the General the good conduct of the detachment, and to make especial mention of Lieutenant Campenet, Second Lieutenant Lorentz, Quarter Masters Labarre of the 5th squadron, Guéridon of the 2nd squadron (already a member of the legion of honor), Cannois of the 2nd, and Cuvilly of the 4th, Corporals Audebrand and Bouverot of the 5th, and Private Vitay of the 6th.

" Labarre, Guéridon, and Vitay, were wounded in making prisoners of the three officers, whom I am bringing back with me.

"Cannois, Cuvilly, and Audebrand were foremost in the fight and displayed signal courage.

"Bouverot saved the life of one of his officers and of two of his comrades."

(Signed) * * * Captain,
Commanding the Detachment.

Q. Do the reports of advance guards differ materially from those of reconnoissances?

A. They do not differ in any thing relating to topography, and information regarding the enemy; but in addition they render a detailed account of military movements, and the position of troops.

Q. Do the reports of rear guards differ from those of advance guards.

A. They are similar to those of the advance guards as to the account rendered of military movements, but, inasmuch as the ground is known, they only allude briefly to its configuration, and only in so far as it is connected with the tactical part of the operations.

Detachments properly so called, and cantonments, also furnish reports; they can be drawn up in a regular manner, and rendered easy and concise by adopting the following form, which the Colonel will send to all detachment commanding officers.

DETACHMENT OR CANTONMENT OF * * * *

Report from the 5th to the 10th of January.

Received..... An order from head quarters relative to
* * * and dated * * *.

Forwarded..... Private * * * to hospital.

Punishments..... Privates * * * and * * * sentenced to four
days' simple imprisonment for drunkenness and ill-treating their horses. Private * * * ordered to march on foot for being late in falling in.

<i>Leave</i>	Twenty-four hours' leave granted to quarter master * * * to proceed to * * *
<i>Duties</i>	A corporal and four men mounted as police guards over the square.
<i>Events</i>	Privates * * * and * * * have fought together; * * * has been slightly wounded with a sword cut in the arm. Horse No. 1,172 killed by falling on the ice.
<i>Alterations</i>	Trumpeter * * * gone to head quarters; relieved by trumpeter * * *.
<i>Requisition</i>	A surgeon required to report upon the health of the men.
<i>Health of the Men</i> ...	Good.
<i>Health of the Horses</i> .	Good.
<i>Remarks</i>	The stables are bad; forage is abundant, and of good quality. The inhabitants display insolence of demeanour.

(Signed) * * * Captain,
Commanding the Detachment.

CHAPTER XXII

OF WORDS OF COMMAND ON SERVICE, OF POSITIONS TO BE TAKEN UP
IN ACTION ; OF THE MANGUUVRES TO BE THEREIN PERFORMED.

Q. What ought to be the first care of an officer in command ?

A. To accustom his men to the most profound attention as soon as the order, "Attention" has been given. This indispensable condition he will obtain in difficult circumstances the more readily in proportion as he has inspired them with confidence and affection.

Q. What ought to be the nature of the words of command ?

A. Clear, plain, and, especially, to the purpose.

Q. In order that a word of command may be clear and plain, that is, that it should reach from one end of the line to the other, and that it should reach as well at the end as at the beginning of an affair what is required ?

A. It is necessary that a commandant should calculate three things ;

I. What are the tones of his voice, which are most sonorous, and which he can use with the least fatigue.

II. The range of his voice.

III. The value to be attached to accidental circumstances, which may affect the selection of the spot from which the orders should be issued to be better and more generally heard ; such as the wind, physical obstructions, the roar of cannon, the interruption of the line, the distraction of the soldier caused by the serious and partial occurrences which threaten him, or occupy his attention.

Q. And the appropriateness of the order ?

A. Ah ! that is the evidence of a military genius ! It is the secret of the whole science ! The officer, who gives the appropriate word of command, is the pilot who, in the storm, shifts the

helm within a foot of the sand bank and saves the vessel ! It is upon this *d propos* that may depend the success or the destruction of a regiment of light cavalry, its honor, or its disgrace.

Q. What is it that gives birth to the instinct of the à propos ?

A. First, a decided character, which is never surprised, and which forms its calculations with the more coolness in proportion as the emergency is more imminent ; next a habit of continual observation, which enables us to fathom the plans of the enemy as well as if we were in his camp, in the midst of his ranks ; which dives into the soul of his leaders and soldiers ; which, by a single manœuvre of that enemy, enables us to predict confidently all his subsequent ones.

There are some officers, who conceive that they ought not to speak in their natural tone of voice ; they are wrong. There is no necessity that a word of command should be a deep bass, and, provided that it be not ridiculously sharp, it only requires to be sonorous. An unnatural tone has two inconveniences ; the first, that it speedily becomes fatiguing ; the second, that it is never the same. In warfare the first is very serious, and the second is not less so, for there are a thousand emergent, unexpected, circumstances, either in a confused fight, night time, &c. It is necessary that the leader's voice should be recognized the moment that it makes itself heard.

We should accustom our men to the invariable intonations of our words of command ; those simple inflexions in certain cases are, as regards the ear which is accustomed to them, a preparatory warning note of the manœuvres about to be executed, and of the rapidity which is to be stamped upon them.

Thus, for example, if you wish to halt your men slowly, when marching in line, dwell upon your caution. "Line;" if, on the contrary, you wish to pull up sharply, utter this same word briskly.

A very excellent practice to be followed on service, when in command of a large body of men, is to unite action to voice. Thus, for instance, in the case quoted above, at the word "Line," raise your sword perpendicularly ; at that of "halt," drop the point, and let these movements partake of the vigor more or less of your word of command.

If you give an order to take ground either to the right or left, at the word "sections right" (or "left"), point with your sword in the direction whither you are about to proceed.

This habit once acquired may be of great use in certain cases in which, whilst commanding several squadrons, the wind carries our voice away from the body of troops, or in which the distance, or the noise, prevents our being heard; our gesture then powerfully supplies the place of the word of command that has not been heard and decides, by itself alone, an important manœuvre.

When the commandant of several squadrons, wishes to break from line into sections right or left, and march, or retire this line by "sections right about turn," or "left about turn," nothing more is required than that the word "forward," which he gives, should be delivered as laid down in the regulations for cantonment duties, and consequently should be uttered at the same time as that of officers commanding squadrons; it is necessary that the troops should move off immediately on the word "march," of their commanding officers of squadrons. This celerity is of so much the greater use in those cases where the inequalities of the field of battle do not admit of movements as mathematically exact as on the parade ground, when the squadrons may wait, and the movement be undulating; whereas, if it is pointed out before hand, the attention of officers commanding squadrons will be directed exclusively to its execution, which will necessarily gain in simplicity, unity, and correctness.

The talent of manœuvring on a field of battle consists in always preserving the proper distance; in never being hemmed in to disadvantage by the enemy in spite of oneself, and in profiting by all the peculiarities of the ground, and by all the occurrences which may turn the scale in our favor. It is a game of chess which is played, and to come off victor in which it is necessary to see all over the board, and never to hazard a stroke until we have calculated all the chances upon it.

As soon as the officer has thoroughly taken every thing in through his eye, he ought to digest his plan, and take his resolution at once.

In war the worst plan that can be taken is to form none; ir-

resolution is worse than ignorance ; it is the infallible token of weakness.

The game is never lost ; for often a daring resolution will vanquish fortune. It is the part of genius to decide what can be undertaken, and what ought to be left alone.

Upon an open field of battle, long before swords are crossed, the skilful tactician understands his enemy. The correctness, the union, the excellent arrangement of his manœuvres, their imperturbability under the fire of artillery, have already enabled him to form a correct estimate of the leader and of the men, with whom he has to deal. Let these indications never be lost sight of, and let them exercise an important influence on his plans.

Let us remember that, as we form our opinion of our adversary, so will he draw his conclusions regarding ourselves. The more favorable the impression that we make, the more shall we disconcert that enemy, and thus succeed in demoralizing him before we have attacked him in earnest. If we obtain this immense superiority over him by this single fact, we shall have doubled our strength, and he will have lost in proportion.

Q. Upon an actual field of battle, should we make any selection in the manœuvres which we have learnt theoretically ?

A. Yes, certainly, for several of these movements on the field of battle might seriously compromise us. When out of shot of the enemy, we have no inducements to perform complicated manœuvres, and I cannot too often repeat that we must abolish every thing which unnecessarily fatigues the horses ; when we are close to the enemy there is still less inducement for these manœuvres, because they are never executed with the coolness and precision of the parade ground, and we might be cut to pieces in a ticklish formation.

Q. What do you understand by complicated manœuvres ?

A. All those which consist of two distinct movements ; such, for instance, are formations, changes of front on the centre, for forming line to the rear, &c.

Q. But, nevertheless, cases may occur when it is necessary to form line to the rear on the rear of the column ?

A. In that case, divide the movements. First give the word, " Sections right, or left, about turn ;" then the column being in the new direction, " Form line for action front ;" thus you will have no occasion to apprehend hesitation or mistake, and you will obtain unity and safety.

Q. *What then are the safest manœuvres in the field?*

A. All those which are simple in execution, and most compact ; which require the fewest words of command, the performance of which the men are most generally accustomed to, and which are consequently performed, without compelling the adoption of rigid mathematical precision. Those, in short, which are performed in one uniform mode from the head to the rear of the column, or from the right to the left of the line.

Thus, near the enemy, for example, it is much better to give the word " Sections right, head of the column to the left," than " Squadrongs, wheel by sections."

If it be dangerous to wheel our column at a short distance from that of the enemy, and thus expose it to being attacked in flank, we must, if we are obliged to do so, at least not uselessly prolong the duration of this dangerous state of affairs ; thus, when it is necessary for you to reform line to the front, it is much better to order, " Sections right and left shoulders forward—march—halt," than " Column, halt—right and left wheel into line," &c. In this manner you gain in celerity, and you do not halt until you are formed.

You must abstain from all counter marching, and, as much as possible, from all movements by fours, which a single round shot may upset irretrievably. The section is your proper formation.

Q. *You have stated that changes of front ought not to be made on the centre. What will you substitute for this?*

A. The principal inconvenience of formations or changes of front on the centre, is that four distinct movements are required, and the march by column, as also the formations, in a manner inverts one half with reference to the other, which consequently causes the whole regularity of the regiment to depend upon the coolness not only of the captain in command but of a leader of a section, nay, even of a single file executing the manœuvre.

In the field, you have almost always more room than you require for your deployments ; especially when you are in position. The mathematical limits, which control your movements on the drill ground, no longer exist ; you have consequently elbow room ; it is therefore much better that you should make your changes of front on one of your wings than on the centre ; it is even better with a regiment of two, three, or four squadrons, to order the whole regiment to wheel to the right together at the trot, than to wheel by sections to the right, and reform in succession.

Q. This movement appeared to me to take up more time than that laid down in regulations ?

A. You were in the wrong then ; for the points of departure, and of arrival, and the space passed over being the same, this cannot be the case ; but you will derive a great advantage from it under fire, in having only one word of command to obey, and in remaining formed throughout the whole movement.

As a general rule, whenever you are formed near the enemy, never break but in good earnest, and, when you thus break, subdivide your body as little as possible, and still in such a manner that each of its portions may possess such a sufficiently intrinsic strength as to offer a respectable resistance in the event of a sudden attack of the enemy.

The field of action differs from that of manœuvre in this that, upon it the object is not to *manœuvre*, but rather to take up positions. The theoretical letter of precept disappears to make way for the serious fact of application.

Regard therefore only the object. If you can attain it by substituting simple for complicated movements, do not hesitate to do so. Only execute those that your men are too well acquainted with, so to speak, and in which it is impossible for your officers or men to make any mistakes ; for it is necessary, I repeat, that your foresight should remove all cause of excitement, which ill harmonizes with difficulties.

I will go further and say that just as a man is able to make better use of his right, than of his left, hand, so does a regiment manœuvre better to the right than to the left. Profit then by this

remark, in cases of emergency, and which will restore thorough coolness and correctness.

Q. I thought that the Regulations had provided for every thing, and that upon the field of battle we ought to perform no movements but such as are laid down therein.

A. Upon the ground in question we must make use of those which the urgency of the case points out. The Regulations neither could, nor ought to, provide for every thing: look therefore upon them as a classical model, from which we should not depart without necessity, but not as a complete Gospel, out of the pale of the literal observance of which there is no salvation.

Thus, I will take an example, which very frequently occurs in war. I suppose that your regiment is marching on a plain, in echelons of squadrons at full distance, right in front. A defile of some paces and of the width of one squadron suddenly appears in front of the leading one. It is essential for you to pass it quickly. Would you give the word, as laid down in the Regulations; "Squadrons, halt!" "Form line on the leading squadron, march!" then, "Form close column of squadrons on No. 1 squadron, march!" ; then next, "Column will advance, march!" ? Would it not be much more simple and rapid to give the word, without halting, "Form close column on No. 1 squadron, trot, march!" ?

Thus, there is no halting, no time lost, the squadrons, by "sections half right," will take their proper place in the column. .

Having cleared the defile, if you deem it expedient, you can resume your march in echelon without halting, by ordering, "Column will deploy into echelon of squadrons at open distance on No. 1 squadron." This is performed by an inverse mode to the preceding.

If the defile should present itself in front of any other squadron than the leading one, as your echelons are at open distance, you can form column upon that squadron by the same movements, in increasing the pace.

Q. What is the best position in action?

A. That which gives us the advantage of the ground for attack and defence.

Q. In what do the principal qualities of a good position consist?

A. In having its flanks protected by obstacles that the enemy cannot overcome, its retreat to the rear secured, and the ground in front commanded by the position; and in being one which, while offering serious impediments to the enemy allows us on the other hand to bring our whole strength into play simultaneously.

Q. Do you not generally take up your position upon heights?

A. Yes; because you can command a more extensive view all round; because the slopes offer more difficulties to the enemy; and because, as he cannot look down into our position, we can, under cover of the screen offered by the ridge of the slope, establish our lines and concentrate our forces without being perceived by him.

Q. If the ground, on which you are compelled to form up, present disadvantages?

A. You make haste to ascertain them, and compensate for them by a judicious arrangement of your men.

Q. What are the capital defects of a position?

A. A position may possess many advantages to its front, but be unprotected on one of its flanks, which is so much the more dangerous as the enemy attacking us upon this unprotected flank, may force us on the obstacle which defended the other, hem us in there, and cut us to pieces. A position, which has not sufficient depth, ought not to be held, for cavalry require space not only for manœuvring, but to maintain the whole speed of its impetus when it charges.

The most disadvantageous position is that which offers a defile to our rear: the nearer that defile is to us, the more dangerous is our position. Consequently, whenever you are obliged to pass a defile in front of you, close up your troops before hand, and have your support close at hand, so as to enable it to powerfully sustain you when you make your sortie therefrom; and proceed a long distance beyond it, so that the troops in your rear may pass it rapidly without confusion, and take up a position which will enable them to support you; and hinder you from being driven back headlong into the defile, hemmed in, and destroyed there.

Q. *What do you do upon open ground?*

A. I march and manoeuvre, so as to be able to deploy, and form line rapidly in any direction. It is very seldom that a plain is so perfectly level as to present no advantage of surface that may be seized upon against an enemy. A ditch, a gate, meadows more plashy than others, fields with deep furrows which may throw down horses that cross them perpendicularly, slight undulations, all ought to have their proper value attached to them when we are about to cross sabres : derive from them all the advantages of support, which they can yield you, and turn them against your enemy to his destruction.

Q. *Where do you generally place light cavalry?*

A. The line once formed, upon its flanks.

Q. *Why?*

A. Because it serves as flankers, and protects it during the action ; because, from those points it harasses the enemy, and because, in a change of front, its extreme mobility communicates more rapidity to the movement of the wings.

Q. *Its place having been once assigned it, ought it to remain there, without budging?*

A. No. Its commander has two things to observe : the first is its relative position in the general movement ; the second, its position with reference to itself. Thus, provided it retains strictly the position of order which belongs to it with reference to the general details of the action, when it is not in ambuscade, he may execute partial movements, but to no great distance, either to divert the attention of the men from the gaps made in their ranks by the round shot ; or, when they are needlessly exposed, to protect them from it, by availing himself of the undulations of the ground as a protecting revêtement ; or to mask his number ; or to concentrate his squadrons, if he perceive a movement which threatens the enemy, and the necessity of a fresh disposition of his men for deployment.

Q. *If the round shot annoy him, what does he do?*

A. He selects the ground, which can protect him from it, and moves a little to the front, to the rear, or to one side.

Q. If, though masqued behind the cover which he has selected, the pieces of the enemy, which have guessed his position, point them in such a manner as still to reach him?

A. He throws back one of his flanks. Further, the best method of executing this movement of which I am speaking, whether to the front or to the rear, is to proceed in a direction perpendicular to his line to the spot which he has selected. Arrived at the place beyond which he does not wish to go, he should move by sections left or right, to a hundred yards on his left or right, and then reform line. The batteries, which suppose that you have reformed in your former direction will not deviate from their line of fire, and will throw away their shot, which will pass to your right or left. In order to deceive the enemy more effectually, leave your skirmishers in their original position.

Q. Ought you to remain mounted during the whole continuation of an action?

A. No. As I have several times repeated, it is one of our first duties to husband the powers of our horses, and never to employ them except usefully. Never overwork them, which only displays ignorance on the part of the commander, and worse than that. In the same way that, with regard to the guard of a bivouac or the composition of a reconnaissance, it is only a bad officer who orders too many men on duty, so precisely on the field of battle it is only a blockhead who leaves his men on horseback without necessity and uselessly exposed. When you are in position and can command an uninterrupted view all round you so that you cannot be surprised, nor brought within range of round shot, make your men dismount, but allow no man to quit his horse. Remember, moreover, that, every time that a trooper dismounts, he ought to tighten his girths.

Q. If a squadron, which has proceeded to the front for any cause whatever, and which finds itself masqued by the nature of the ground, suffer from round shot, what ought it to do in that case?

A. Extend its files, or even increase the distance between its sections.

Q. Might it not also put its troopers in single file?

A. That is sometimes done on actual service; but principally

with the view of impressing the enemy with a false opinion of our actual strength. If we adopt this plan, we must do it in such a manner that the enemy may not be able to guess that our rear rank is wanting.

Q. Which is the best way of forming on the ground on the field of battle?

A. In close column ; we shall derive six advantages therefrom, which, taken together, form the whole mechanism of the art of manœuvring.

I. The being able to move easily and rapidly in every direction.

II. The concealing our strength.

III. The holding that strength in hand, so as to be able to act according to circumstances, and the nature of the ground.

IV. The not deploying, except when we are short of men, and the keeping our reserve compact.

V. If we are in greater force than the enemy, the demoralizing him by the single circumstance of a deployment executed at the proper moment.

VI. The finding in the most simple and the most rapid movement, that deployment, which is most generally useful, that of echelons.

Q. How can the enemy compel you to show your strength to him?

A. By cannonading you ; because when drawn up in deep order, you suffer too much from round shot to hesitate about deploying as quick as you can.

Q. But, if it be your object to masque a portion of your forces from him ?

A. You may then deploy upon two lines, sending the second sufficiently far to the rear for the round shot directed against the first to ricochet over it.

Q. If you have only one regiment of six squadrons under your command, what order do you give in that case ?

A. "The column will deploy upon the first and fourth squadrons ;" and, the lines having been formed, the second one will go "Sections left about wheel," and, having proceeded a hundred yards to the rear, will front again by a similar word of command.

Q. *If, in close column, you apprehend a double attack, what do you do?*

A. I give the word, "Column will open out in rear of the right squadron." At this order, all the squadrons, with the exception of the first, wheel left about by sections, and resume their original front in succession, as soon as they have attained the distance of the front of a squadron. The column thus formed can deploy in every direction, only each squadron is unsupported.

Q. *If, after a deployment from close column of echelons, right in front, as laid down in the Regulations, you are threatened with an attack upon your left flank, what word do you give?*

A. "Squadrons, take open order in rear of the right squadron." This movement is executed the same as the preceding; your echelons being thus at open order, if the enemy move down upon you, you give the word: "Squadrons will wheel to the left—halt," in order to face him in echelon order; or, when the wheel is nearly completed, "Front form line."

Q. *These manœuvres are not laid down in the Regulations.*

A. True; but they are useful, because they are simple, and because they fulfil the grand requisite of war for light cavalry, that of being able to front promptly in every direction. Sometimes, by emergent and unexpected movements in action, the order of the squadrons of a regiment may be intermingled. The first squadron, for instance, after having been detached, may enter the line as the third. Let it at once call itself No. 3.

The squadron of manœuvre is no more the *leading squadron* than the *battery* which opens upon the enemy is the *leading battery*. Get rid therefore of the habit of confounding them together. To never manœuvre inverted is a bad look out for light cavalry, for circumstances in action may imperiously require it to be done under penalty of annihilation.

Q. *I suppose, for instance, that, whilst retreating in close column, right in front, an occasion presents itself on which you must face rapidly to the rear: would you perform a slow countermarch, during which the enemy might cut you to pieces?*

A. No I should order, "Sections right about, (or, left about), wheel."

Q. *Would you deploy in this order?*

A. Yes, certainly, if the exigency of the case required it.

Q. *But you would be inverted?*

A. What signify the means that I employ ? Ought the army to perish rather than a principle ? In doing this, would not the emergency be better met than in any other way ; should I not face the enemy in a second ? should I not be perfectly ready to receive, or attack him ? Only, I would deploy in inverted order, in order that at the first going about by sections, the regiment might find itself restored to its natural order.

Q. *And, if in close column, and the sections inverted by going about, you have to break by sections, would you give the word, "By the left, by sections, break squadrons?"*

A. No : but "by sections, break squadrons." And the fourth sections, finding themselves on the right of each squadron, I would reform my column at open order in their natural order, and I should then march with the regiment, left in front.

Our error lies in always confounding the right of a regiment with the first squadron, and the left with the rear one ; and, in the same manner, the right of a squadron with its first section, and the left with its fourth. Thus, when, by a compulsory inverted formation, the first squadron finds itself on the left of the line, and the first sections on the left of their squadrons, we are all abroad how to act. In light cavalry in war time, we require to be always ready, and to know what we are about ; hesitations on these points are most dangerous ; in order to avoid them in the circumstances pointed out above, fill up what is left wanting in the Regulations, by making it understood before hand that, in manoeuvring a squadron, the right and left of the line, whatever may be the partial order of the formation, shall invariably be the present right and left, without reference to the numbers of the squadrons and sections ; and that consequently a line or a close column, having wheeled round, on the spur of the moment, to show front to the enemy, the former rear squadrons and sections will become the right, and the leading ones the left, then there will be no longer any doubt as to the orders to be given, and the mode of carrying them into effect.

I have unfortunately several times seen the same circumstance occur in action, viz., that, where a regiment of cavalry, venturing too boldly on open ground, beyond the reach of its supports, finds itself vigorously charged, turned, and broken by a superior force; and, after a valiant and desperate resistance, but a defence rendered ineffectual by the deficiency of methodical manœuvres, has been obliged to resort to a retreat, or rather to an individual *sauve qui peut* flight, during which it has been very roughly handled, before assistance had time to arrive to rally and support it.

Q. If similar circumstances should again occur, what would you do?

A. Follow the example of the infantry, which faces in every direction, or forms square?

Q. How?

A. It is beyond contradiction that a colonel, finding himself surprised in a plain, and cut off from his supports by forces very superior to his own, and having no prospect of effecting his retreat in echelon, or in line, should form close column as quickly as possible; for his only hope lies in a depth of order, with which he will present less surface, will expose fewer men, and will collect his body better together for the purpose of making a gap by a more overpowering and weighty charge. If the regiment, composed of four squadrons, be in line, the colonel will order;

“Form half distance column on the second squadron—Gallop—March.”

If the regiment be in close column, he will order, “The column will open out to half distance from the rear—trot—march.”

The column thus formed, he will order, “On the second and third squadrons, form square—trot—march.”

At the caution, the officer commanding the 1st squadron, will order, “Lay your lances in rest,” or, “with carbines, ready.”

The commandants of the 2nd and 3rd squadrons will order, “First division right wheel—second division, left wheel—trot.”

The commandant of the 4th squadron will order—“Squadron will advance—line by the left.”

The commandants of the first divisions of the 2nd and 3rd squadrons will give the word, "Division, right wheel—trot."

The commandants of the 2nd divisions of the 2nd and 3rd squadrons will order, "Division, left wheel—trot."

At the word, "march," repeated by the superior officers, commandants of squadrons, and the commandants of the divisions of Nos. 2 and 3 squadrons, the movement will take place.

The captains, and officers commanding the two first sections of the three first squadrons, will clear the front by proceeding to the right of each squadron, and fill up the vacancies at the angles of the square. The officers commanding the 3d and 4th sections of the first three squadrons will proceed to the left of their divisions for the same purpose.

The captain of the serre-files of the 2d squadron will march with the first division of his squadron, the one of the 3d with the second of his; these two officers will place themselves in the centre of the lateral squadrons.

The captain of the 4th squadron will make his ~~left~~ pivot left oblique four paces, and immediately order, "By fours, right about wheel, and to three paces from the pivots of the third squadron—march—halt—right dress."

The alignment of this squadron will be performed by dressing back two or three paces.

The officers of the fourth squadron will post themselves in the same manner as those of the three first.

The superior officers, and the serre-files of the fourth squadron will enter the square.

The square being formed; the officers and non-commissioned officers of serre-files will, for the time being, command their respective squadrons or sections.

If the regiment be armed with lances, the lances will be brought to the "charge;" if it be armed with carbines, the troopers of the front ranks will bring their pieces to the "ready," and not deliver their fire, either from carbine or pistol, except by order of the serre-files.

Q. You would thus wait for assistance without being apprehensive of your troopers being dangerously turned ; but, as soon as the assistance had arrived, how would you break the square ?

A. The colonel would slope his sword, and order, "Attention ! — Prepare to break the square—trot—break the square—march." At the second word of command, repeated by the superior officers, and second captains; the officers will resume their position for line.

The captains of the second and third squadrons will enter the square, so that they shall be in the centre of their respective squadrons, when reformed. "

The officers in command of the fourth squadron will re-enter the square, to resume the places which they occupied before the "By fours, right about wheel." The serre-files of this squadron will move out of the square, to resume the places which they occupied before the same going about.

' At the third word of command, repeated by the superior officers, the captain commanding the first squadron will order, "Squadron will advance—line by the left."

The officers commanding the first divisions of the 2d and 3d squadrons will order : "Fours left—column left wheel—trot."

The officers commanding the second divisions of the 2d and 3d squadrons will order: "Fours right—column right wheel—trot."

The commandant of the fourth squadron will order, "Fours, left reverse." At the word, "march" repeated by the superior officers, the captains commanding the 1st and 4th squadrons, and the sub-alterns commanding the divisions of the 2d and 3d, the movement will be executed.

The first squadron, having advanced sixteen paces, will halt and form line at the words of command that its commandant will issue ; "Squadron, halt, left dress."

The heads of the columns of the divisions of the centre squadrons will move towards each other.

The captain commanding the centre squadron will order at the proper time, "Fours right and left—march—halt—by the left dress," and will post himself on the left of his squadron when formed up.

The captain commanding the 3d squadron will, at the proper moment, order, "Fours right and left—forward—left oblique—(twelve paces)—halt—left form line;"—and will take post on the left of his squadron when formed up.

The captain commanding the 4th squadron will order, "Forward—line by the left (12 paces)—left dress," and will post himself on the left of his squadron.

Q. If you had five, or six, squadrons, could you perform this movement?

A. Just the same; at the word, "Upon the 2d, 3d, 4th, and 5th squadrons form square." The square would no longer be equilateral, but it would be regular, and, as it would present a front on each face, the enemy could not turn it nor cut down the squadrons from the rear.

The very groundwork of the talent of manœuvring in the field is the being so accustomed to study the ground, and the being able to judge distances so correctly, that it becomes, so to speak instinctive, and determines its calculations at the first glance unalterably, so that a movement when ordered can be executed immediately and without requiring to have any thing corrected in it.

It is necessary that this *coup d'œil* should embrace at the same time the space which the squadrons will occupy, and that, upon which these squadrons, after they have formed, will have to act, whether to their front, to their flanks, or to their rear; for this reason, it is necessary that a commandant should march, sometimes at the head, sometimes on the flanks of his column, always cresting the undulations of the ground, in order to check his calculations: having attained this object, he takes up his proper position of command.

One of the best methods of gaining a knowledge of the ground, and correctly estimating its rising grounds, its levels, its obstacles, and its facilities, is to follow with the eye the undulations, and observe what occurs on the line of march of the enemy's skirmishers. This line describes for the practised eye the ground on which you wish to carry on your operations, so much the more usefully, as it takes it in gradually in its development as a whole, and in detail. This knowledge is so important, and the reconnoitring, which I have

pointed out, so simple, that we must, in certain cases, in order to obtain it, drive back a portion of the line of the enemy's skirmishers, the retreat of which will give us the desired information.

The *art of war*, on a small scale as well as a large one, is the combination and employment of superior forces upon a decisive point.

To be able to assume the offensive is the most advantageous for us, because we thus oblige the enemy to adapt his movements to our own and thereby dishearten him.

The only use of the defensive is to gain time.

We ought never to take up a position, in which we may be cut off from our supports.

We should never charge to a distance without being supported, or take any step, which, after a reverse, might entail more fatal consequences upon us, than our success would have proved advantageous to us.

" The best order for attack is in echelons, because the lines support each other in succession ; their flanks are protected ; it is impossible for the enemy to manœuvre on our flanks without our being prepared to receive him ; and because, in the event of a check, our retreat is regular, and properly supported.

However numerous may be the troops employed, there ought to be unity in their action, and consequently in the conception of the order. Each detachment forms part of a grand whole, and ought only to act as a member of the same body. In cavalry, centralization of action, as it constitutes all its celerity, so does it, all its strength.

CHAPTER XXIII

OF CHARGES.

Q. Upon what does the success of charges depend?

A. Upon the *à-propos.* (Upon their being executed at the proper time.)

Q. Is it difficult to hit upon the *à-propos*?

A. I repeat it.—*The knowledge of the à-propos is the genius of war.*

Q. What are the useful objects of the *à-propos*?

A. I. To surprise the enemy.

II. To reduce him from a strong to a weak point, when he has lost confidence, or made a false move.

III. To encounter him with troopers more compact in order, and horses fresher than his own.

IV. And to retain more confidence in ourselves than he possesses in himself.

Q. What ought the officer commanding a corps to do, who has received orders to charge?

A. To approach as near as possible at a moderate pace with his squadrons in line, draw swords, and charge immediately.

Q. I thought that it was necessary to draw swords before advancing?

A. That is a mistake. The later you draw swords, the better you will do it. Of the moral effect, which a charge produces upon the enemy, three-fourths consists in the imposing and powerful success of this charge. It must then be well combined beforehand, and nothing should be neglected which can render this effect more surprising and more complete.

If a line draw swords previous to putting itself in motion, it gives intimation of its intentions too long beforehand to the enemy, for which he becomes prepared, and holds himself in readiness ; the instant of surprise, of such consequence in action—has passed away—is irretrievably lost.

If, on the contrary, the regiment, which is advancing, have its swords sheathed ; if it leave the enemy in doubt as to the seriousness of the movement, which it is making, the blades starting all together from their scabbards, and flashing before his eyes, allow him no time to reflect coolly on the danger, the feeling of which makes him waver, and often decides his retreat despite of himself. Further, the moral effect, produced upon the enemy attacked, reacts in an inverse ratio upon the assailant by this same movement.

The trooper, who has had his sword a long time in his hand, loses the freshness of attachment and enthusiasm for his arm ; but, if this same trooper grasp his sword at an order vigorously given by his chief, at the very moment when he ought to make use of it, he grips it with more force and with more energy, and strikes with a heartier good will. The trooper, who is charging, is a complete entity, inspired by one single sentiment, which partakes of the nature of intoxication ; do not cool down this feeling, the child of the moment ; by prolonging it—by producing it by degrees, you kill it ! To draw his sword, bury his spurs in his horse's flanks, and cut down the enemy, ought all to be the work of a moment ?

Q. What is the duty of the officers commanding squadrons, or sections, in a charge ?

A. To keep themselves properly aligned, and to see that the men under them maintain the alignment, (calling by name to the men, who hang to the rear), up to the moment that the word "charge" is given. Then, their only thought should be to be the first to break the enemy's line.

Q. What is the duty of the serre-files in a charge ?

A. They keep the rear rank well closed up, up to the word, "charge." If any cowards hang back, they compel them into the alignment. Once in the thick of the fight, their duty as serre-files is over, and they use their sabres along with the rest.

Q. Ought the men to shout when charging?

A. Yes; they ought to call out "forward," but only at the word "charge." This cry ought to be at the pitch of the voice, and shouted out as simultaneously as possible.

Q. In what manner ought a trooper to charge?

A. Bent forward, so as to shelter himself behind his horse's crest, to offer less mark to the enemy's fire, see less of the danger that he is running into, and inspire his horse with more energy. This first position also powerfully increases the moral effect that the trooper produces, when, reaching the enemy with shouts, he suddenly draws himself up to his full height, aided by shortened stirrups, and appears to him in a threatening attitude.

Q. The charge once undertaken, what ought the officer commanding the corps to do?

A. Animate it by word and by example; then immediately collect a few troopers into a mass, who, arranged in ranks, and showing an intrepid countenance, form the rallying point. If the charge dash forward, this nucleus accompanies it; if it be converted into a retreat, this little band retires more leisurely, not allowing itself to be broken: its example retards the retreat, makes it more compact, and enables it promptly to resume the offensive.

Q. Ought we to charge with rapidity?

A. The sharpest charges are always the surest and the least dangerous for those who make them. They must be directed with greater vigor against such a... such a nation, which, more or less than another, hazards its cavalry.

The Hungarians and Prussians being once on the retreat, there is no middle path; it is necessary to press them at the sword's point, or else to abandon the charge at once, coming firmly to the rally.

Q. Which is the best description of charges?

A. Those which take the enemy in flank, inasmuch as they inflict a double evil on him, first by demoralizing him, and secondly by overthrowing him by the force of impulse, which is all in your favor. It was a charge of this description that Colonel Bro made

at Waterloo with so much intelligence and bravery, when he recaptured from Ponsonby's brigade one of our eagles, which the English had taken.

Q. We must then restrain the pace of our horses before we break into the charge?

A. Yes; and, as soon as the charge is sounded, have no pace but one—the gallop.

Q. How should we act against infantry?

*A. Charge rapidly, and up to the mark ; if the enemy show disorder, if his lines be unsteady, and his ranks begin to open, through with you ! If he keep closely locked up, present his bayonets, and be afraid to load, wheel round the square, which you will threaten in every direction. Stun him, and call out to him that he is a *prisoner* : this word is universally understood. If he waver, dash in ; if he surrender, no more slashing with the sabre, but, the arms having been grounded, separate the men at once and take them to the rear.*

If, on the contrary, protected by an obstacle, that you have not perceived, he receive you coolly, be immovable, and reload, and you cannot hope to break him ; return at full speed, stooping over your horses' necks, and rally out of musquet shot, in order to threaten him afresh as soon as he deploys. To act otherwise is a foolish pride, and betrays ignorance of war.

Q. If you charge infantry in line ?

A. Endeavor to take him in flank, ; you will receive few musquet shots, will throw him into disorder, and have the ball at your feet. If you cannot do this, and his line be extended, break this line in its centre.

Q. If you have to charge a square ?

A. Attack it at one of its angles.

Q. Why ?

A. Because the enemy can only direct an oblique fire upon you, which is much less dangerous than a direct one.

Q. What is the impulsive power of a trooper proceeding at the charge ?

A. The weight of a trooper at the charge, augmented by his speed, is fully equal to 833 lbs., which can, and ought to, overthrow every thing.

Q. *What moment do you select for charging infantry?*

A. That in which he makes a movement in line, or in column at open order, or else that in which he has been shaken by artillery.

Q. *If you charge infantry in column, what moment do you select?*

A. That in which his column opens out, or when the ground, which you have to go over to reach him, is easy for your horses; you then take this column in flank, and, dashing through it, separate its extremities.

Q. *If the infantry surrender, what do you do?*

A. After having made it throw down its arms, you carry it off as rapidly as possible, and form your squadrons between it, and such of the enemy's forces as might attempt to release it.

Q. *If the enemy's cavalry threaten a charge, what do you do?*

A. You endeavor to take up a position, in front of which there are some obstacles that he does not perceive; you allow him to approach you at speed; and, when he arrives at these obstacles which take him by surprise, and throw his ranks into disorder, you charge him in your turn, and take advantage of his confusion and physical dilemma to overthrow him upon ground which is unfavorable to him.

Q. *Suppose the ground presents no obstacles?*

* A. You judge by the eye whether the distance, at which the enemy commences his charge, is too great. If he have committed this error in the compactness and celerity of his charge, you await him deliberately, and charge him vigorously when his troopers reach you thoroughly blown. This is what we did at Waterloo against the English brigade under Ponsonby.

Q. *If the enemy have not charged from too great a distance?*

A. You put yourself in motion when he has made a fourth of his charge, and charge him in your turn.

Q. *Wherfore?*

A. To have a force of impact equal to his own, and a compactness about a quarter superior.

Q. If it be heavy cavalry that attacks you?

A. As soon as you have penetrated his design, you lock up rapidly in one or more close columns, according to the time that you have to spare, by giving the word, "On the third squadron, form close column, gallop," or, "on the first and fourth squadrons, form contiguous close columns, gallop;" then charging in column the centre of the line bearing down upon you, turn bridle, as soon as you have passed through it, and deploying, and going about, take these heavy and unwieldy troopers, whom you have surrounded, in the rear, and who will fall an easy prey to you one after another.

There is another way of receiving the charges of heavy cavalry. As soon as the enemy begins to move, supposing that you have four squadrons, you order the two first squadrons, "By sections wheel to the right*—gallop—forward;" then, "head of the column left wheel," "sections left wheel," and charge. The two last squadrons will "wheel by sections to the left, forward, gallop, head of the column right wheel, sections right wheel," and "charge." Thus, the heavy troopers, who cannot readily alter their direction, pass through the interval that you have made, and, taken in flank and rear, will find it difficult to extricate themselves from the critical position in which they are placed. This attack will succeed so much the better, if our second line, unmoved by our movement, proceed to the front and charge the cuirassiers in front.

It is requisite for these movements, as for almost all those which involve rapidity of execution, and words of command which go beyond the ordinary routine, it is requisite, I say, that the commander should foresee them some moments beforehand, and should acquaint his officers with what he is about to order, pointing out what each of them has to do in such and such a case. If he does not take this precaution, he runs the risk of being neither understood nor obeyed.

Q. In ordinary cases, what is the best method of charging?

A. In echelons. In case of success, the first echelon shakes, the second penetrates, the enemy; the others only engage so far as

* This is a change of front of the column to the right by sections (Trans.)

they can be usefully employed. In case of reverse, the last squadrons always offer a rallying point, and restore confidence to the first, when they are pursued.

Q. Before charging cavalry, what ought one to do?

A. Feel it, as a skilful swordsman feels his adversary in an assault ; manœuvre, by very simple flank movements, of sections right and left, but always preserving the distances, so as to reform a full and compact line at the first word of command.

Threaten his flanks, and, if the enemy throws himself into disorder by an unskilful and too complicated a manœuvre, seize the critical period, which lasts but a few seconds, and charge home.

A manœuvre that I have invariably seen successfully employed, when two lines are watching each other without stirring, and both are expecting the moment of attack, is to form up rapidly into column of sections one of our flank squadrons, and to send it forward at full trot perpendicularly to within a hundred paces of the enemy's wing, with orders to out-flank him, and immediately, by a movement of sections to the right or left, to reform line and stand fast. It is very seldom that the enemy will not put himself in motion against this detached squadron, which attracts his attention and disturbs him : then, if he moves, and lends his flank to you, you charge with your remaining squadrons, and with every prospect of success. This manœuvre is the whole of war in miniature.

If, whilst a portion of our body charges, another threatens his retreat, we're sure to demoralize him, and you have so much more the advantage over him in that the thoughts of your troopers are directed to one point, whilst those of his are directed to two and, at the same time, different objects.

Q. The theoretical instruction orders us to charge guns as skirmishers?

A. The plan is good upon a perfectly level ground, and when the guns are exposed ; but there is one thing on which the regulations are silent, and that is, that, even upon good ground, it is necessary, before attempting a charge against guns, that we should

first have this ground reconnoitred by a few bold and well mounted skirmishers, who are too few in number, and scattered at too wide intervals to cause us to apprehend that the enemy will throw away a shot upon them. Unless this be done, we run the chance of being obliged to pull up short before we have attained the object, and of returning without any result except our own casualties. This is the precaution that general Colbert took at Wagram, when the emperor ordered him to charge the centre; and it is that, which saving his brigade from unnecessary losses, enabled him so to employ it an hour afterwards as to contribute in a very brilliant manner to the victory.

All fields of battle, and especially those, on which batteries are placed, are not level. The elevation required for pointing the guns shows pretty generally the low places, hollow roads, ravines, and undulations in front of them, and of which we must especially take advantage, in order to secure our advance, and attain from the first the point from which to make our charge, under cover from the grape. Then, more than in any other case, promptitude ensures success.

A further useful precaution is, if the pieces, that you charge, are supported by infantry, to direct your charge in such a manner as to keep these guns interposed between this infantry and yourself: the fear of hitting their own gunners will prevent the infantry from firing.

The best way of capturing the guns, especially upon undulating ground, is to threaten them with a false attack with one half of your body, and cut them off with the other.

Q. Having reached the pieces, what do you do?

A. Charge the supporting body vigorously; then return upon the gunners, cut them down, spare the drivers, make them wheel the guns round cleverly, and support their retreat (in your direction) with courage and compactness.

Q. If the drivers set to with no good will, and slacken their pace in the hopes of being retaken?

A. Keep the points of your sabres against their bodies?

Q. If they betray no fear?

A. Down with them; then four troopers will seize the bridles of the two leaders and pole horses to guide them, and other troopers will strike the horses on their flanks with the flat of their swords, and move forward in this manner.

Q. If it be impossible to preserve the pieces, what is to be done?

A. Your men of theory direct them to be spiked: to do this you would have to supply yourself with hammers and nails before you charged;* but, if our troopers have not taken that precaution, we must simply endeavor to capsize the guns into a ravine, carry off the limbers, or blow out the brains of the horses, break the sponge staves, then be off in a moment, not rallying at too great a distance, in order to return afterwards in force, and attempt to retake the guns.

Q. How would you charge upon a road?

A. If your object be to break through a line, and then deploy on his rear, you form your column *en masse*, with such a front as the width of the road permits, and you charge in column. This manœuvre may be considered more as the passage of a defile than as a charge properly speaking; for, in this case, the charge is only of secondary importance, and serves merely to make a gap.

Q. And if your plan be not to pierce the line?

A. You make provision for your retreat, and in this case, as a general rule, you form your squadrons at wide intervals; at a hundred paces for instance. You only give to your squadrons one half of the width of the road, in order that the squadrons, when retiring, may have room to pass without upsetting their supporting body. Beforehand, you caution the squadrons, which have to retire, to proceed and form in succession at a hundred paces in the rear of the last squadron; you then order that the portions of the squadrons thus formed up shall invariably have their right flank

* This is an oversight of the author's. The spikes and hammers would be found ready to hand amongst the small stores which each gun carries in its limber. In fact, if artillery are compelled to abandon their guns, they will generally previously spike them, and carry off the sponge staves, lynch pins, and washers, to prevent their being turned against their own troops. (Trans.)

resting upon the ditch, leaving free on their left hand that part of the road, which ought to be available for the retreat of the re-assembled columns.

The squadron of the advance guard sets a distance of fifty paces between each of its two first sections. The second division* of this squadron remains in a body. You then order that, whilst proceeding to the front, the portions of the columns shall march at the pace of the leading one, preserving their proper distances; but that, if it be compelled to retreat, the columns shall pull up dead, always at their proper distance. That, as soon as the leading squadron shall retire, the one immediately next to it, at the instant that it shall have passed clear of it, shall charge the enemy and hold him in check, and, if the charge prove successful, it shall resume the offensive, and so on, with reference to the others. In this manner, the horses being fresh, and having recovered their wind, will find themselves always proceeding to attack with a new impulse an enemy who is blown. You also order that your columns shall close up upon each other at the sound of the rally, so that, if you should happen to be threatened on your flanks, you may have your forces cleverly collected.

These orders having been given and thoroughly understood, you will post yourself at the head of the 1st squadron, and you commence the march. You lead on your first squadron, if it has returned; you lead on the second, and so on with the rest. If the ground become open, and admit of your deploying, you sound the rally, and dispose yourself in echelon upon the sides of the road, maintaining upon it a column to support your retreat in case of emergency. If the enemy attack you in flank, you in like manner sound the rally, show front upon the road, having the ditch to protect you, and even manœuvring, if the localities readily admit of it, and point out the necessity for it.'

Q: What ought a colonel of cavalry to do, who foresees that he shall soon have to charge.

* By way of more clearly illustrating these and other movements, we may mention, once for all, that half a squadron forms a division, and a fourth of a division, one section. (Trans.)

A. If in his power, have the girths tightened, and allow the men to drink a drop (of water.) Sometimes, it is not a bad plan in order to excite your troopers, if they have to charge against infantry or artillery, to expose them for a short time to the shots of the skirmishers and to round shot. A body of men, that has suffered, charges more vigorously than another. Not only has it a revenge to take, a retribution to inflict ; but it is then easy to persuade it that to charge is often less dangerous than remaining in position, and that a prompt and vigorous taking of the bull by the horns will relieve it from the irksomeness it has experienced in serving as a target, and being miserably knocked over in detail, without any corresponding glory or revenge.

A general, of the greatest distinction, and of the highest and well merited reputation, has often told me that when an affair was about to take place, he systematically restrained his officers, and that this spur gave them all the more vigor when he hurled them against the enemy. Such being the case, we may deduce the consequence of which it will be for an officer of light troops, who sees the moment approaching in which he will be able to give a decided blow, to keep those under him in play, and make their moral gamut rise gradually to the elevation of circumstances, which will no longer bewilder them when they present themselves in their most serious aspect, and to combat against which they will have the entire collection of their faculties : coolness in reflection—ardor in acting.

As a general rule, when a charge has been fairly begun, carry it out, and put a firm face upon the matter—you will succeed. In every thing there is a waxing, apogée, and waning. This truth, which is equally a moral as a physical one, will naturally point out your clear path of duty and your chances of success. A charge has its minute of headlong ardor, its minute of pell mell, then that of wavering, and that of retreat. Be firm in the second and third minutes, and victory is yours ; and, if you make good use of it this once, the enemy will not take his revenge during the rest of the campaign ; he will be demoralized.

In 1806, I was passing through upper Silesia with the 7th hussars, of which I had the honor of being a second lieutenant : at some leagues from Ratisbon, I fell in with the ruins of an an-

ent gothic castle ; they had very little to interest me as relics of the fine arts, and I was on the point of quitting them, when I saw, rudely sculptured over a door, the figures of two stags butting against each other, and standing on the trunk of a tree that had fallen across a torrent. Above them, was written in German, "The most persevering will carry the day." This device struck me forcibly, and it has never gone out of my memory. Let it be your's at the crisis of a charge.

That which increases the resolution of a charge, and redoubles its vigor, is the confidence inspired by the proximity of the troops of support. Let this never be forgotten. Let these troops, whatever may be the pace at which the attack proceeds, follow with equal rapidity, only halting when it does, and taking up a near and threatening position. Almost all the goings to the right about of charges are to be traced to the want of courage or the ignorance of the troops of support. A charge that is badly maintained, however bravely it may have been commenced, is nothing but a bloody hecatomb. A charge well sustained is always victorious and decisive ! Remember that, by shortening the retreat of a charge by the proximity of the points of support, you do away with retreat altogether.

I call the troops of support not only the first line, which follows and supports the charge, but also the lines in echelon to the rear, and which proceed rapidly, and at short intervals, to take up the positions one after another which have been previously carried.

If a charge be made only in order to reconnoitre the enemy, and compel him to deploy, it is useless to have a reserve, but, as soon as this attack has become the arrow head which is on the point of entering and fixing itself, it is necessary that the troops of support should sustain the charge.

If the officer commanding a charge does not allow his troopers to calculate beforehand their retreat, and the obstacles in its way, it is because he has made the calculation for them. For this reason he ought to be particularly upon his guard against deploying in front of a defile, a marsh, ditches, &c.

CHAPTER XXIV.

OF COURAGE—OF COWARDICE.

Q. What is courage?

A. The most essential quality of the soldier. The Emperor Napoleon rewarded it before every other, especially when it exceeded the ordinary bounds! Speaking of one of his generals, (whom I will not name, because he has since been shamefully soiled by ingratitude), he said, “when a man is as brave as he, he is worth his weight in diamonds.” Reward then especially the courage which carries a man foremost into the fray ; which delivers the coolest and surest cuts ; which is the last in covering a retreat ; which saves his officer or his comrade ; which carries off a color ; which is never bewildered in critical circumstances ; and which finds itself ever prepared! Check the too boisterous courage which makes a man quit the ranks and attack without orders ; even punish it, whatever it may cost you ; it strikes at the root of discipline.

There are several descriptions of courage. It is the courage of excitement that gains battles.

There are soldiers of war, and soldiers of peace. Perfection consists in being both. This perfection is habitual : the man, who in garrison, has the noble self esteem of never being punished, of being quoted for his good behaviour and acquaintance with his duty, of being in short a pattern soldier, retains almost invariably in action this distinction so worthily acquired. But there are, nevertheless, some exceptions to this rule, and a man who has with difficulty conformed to the uniform discipline of the garrison, who has been frequently punished, and is not much liked by his officers, wipes off all at once under fire his previous mischancy conduct, and valiantly regains his spurs in a single day! Officers, remember that fire purges every thing ! No more recollections to the man's dis-

credit—no more reproaches, when the soldier has caused himself to be acknowledged by his compeers as the bravest of all. Let there be a complete oblivion of the past, and let rank and decorations reward a distinguished action. Under fire, usefulness, and correct behaviour, that is courage !

Q. What is cowardice ?

A. Do not hastily tax with cowardice the young man, whose color blanches on going into fire for the first time. His will may be indomitable and his heart beat high, but his temperament is nervous, and the pallor of his countenance is not an index of fear. Where is the old soldier who, frankly, and with his hand upon his heart, can flatter himself that he underwent the baptism of fire without emotion ? It often depends upon a commandant to make weak and undecided young men fellows of intrepidity. Let him bring them under fire for the first time under circumstances that will tell in their favor. Let him act like a skilful huntsman with a young hound. Let him slip them against a wearied foe ; let him make them bite instead of being bitten ; when they return from the charge, they will feel no future apprehension. If he adopt the contrary line of conduct, it is to be feared, that he will demoralize them, and for a long time smother the excitement of their courage.

Q. But if the cowardice be unmistakeable, what is the duty of an old soldier ?

A. In that case no punishment can be too severe, nor too public.

Before the assembled regiment, pluck off the coward's uniform. Let the unworthy individual be expelled from the ranks by his comrades. Let his horse and arms be handed over in his presence to a dismounted conscript. As to himself, let him be taken to the rear and delivered over to the provost marshal.

It has been justly said that it is no despising of life to prefer honor before it. This is estimating honor at its true value. At Waterloo, when Messrs. de Bourmont, Clonet, &c. of such melancholy celebrity, had gone over to the enemy, we saw a battery of our guard throw itself at speed upon the English ! " Duchand is deserting !" cried the emperor. " Duchand a deserter !!!—He

posted himself within a quarter range, concentrated on himself the whole fire of the enemy, and proved by the heaps of slain Englishmen the inconsiderate justice of the Great man. Brave Duchand! Inscribe on thine arms, “Duchand deserts!”

CHAPTER XXV.

OF MORAL EFFECT. OF MORALE.

Q. What is moral effect in action ?

A. The inconsiderate feeling of strength or weakness. That which, at the first blush, inspires confidence or terror.

Q. What is it which has the greatest power to produce it in its unfavorable meaning ?

A. Surprise.

Q. What modifies it ?

A. The nature, more or less firm, of the spirit which entertains it ; the nature which summons more or less promptly to its assistance, reflection, and its powerful resources.

Q. In the case in which this feeling acts by terror, what does it produce ?

~~A.~~ At first, the absorption of the moral and physical faculties : next, hesitation ; then the care of self-preservation.

Q. When it acts by confidence ?

A. It gives tenfold strength ! It is this feeling which in 1806, acting in its double sense, made six thousand Prussians, with two hundred pieces of cannon, posted behind the walls of Stettin, surrender to five hundred French hussars, whose confidence forbade their doubting of success.

The moral effect is never equally divided in its double sense between two bodies fronting each other. One has confidence, and the other terror ; and the terror of the one always bears an exact proportion to the confidence of the other.

Three-fourths of the moral effect is in the power of the cavalry ! —never forget this, and consequently always act with vigor and ra-

pidity upon the ground. In this manner, all hesitation will vanish. All the dangerous equilibrium will be removed, and your success will make the scale kick the beam !

Q. Is the moral effect in the power of the commandant ?

A. Yes, often ; when this commandant is *complete*. That is to say, when he possesses that intimate, entire, confidence, which invests him with the right of seeing, thinking, and acting for the whole.

Q. In this case, may the moral effect then be overmastered and destroyed by a sudden power, of this nature ?

A. All its rays tend to break in a concentrated manner upon the intermediate point, which is the leader. He has changed the cause. The soldier no longer regards either the enemy or the danger, but this leader, and he says to himself : “ It is possible that we shall have warm work ; but he, he will bring us back all right. He does not flinch ; our business is in good hands ! He smiles, we shall cut them up properly ! ” And if the leader responds to this thought, which he has foreseen long before, by coolly pronouncing these words ; “ Sections, left about wheel—walk,” the retreat will be performed with the greatest compactness. “ Steady, boys, steady ! ”—Not a muscle moves. “ They are on us—charge ! ” The enemy is lost !

And if, in a night surprise of our bivouacs, the confusion be at its height, let this same voice of the leader call out—“ On me, troopers, right dress,” “ Make ready ;” this voice recognized and obeyed arrests the disorder short, and upsets fear and the enemy together. *

I repeat it, as soon as the line of the moral effect, which, prompt and direct, flies like lightning from the cause to the impression, can be broken by any intermediate thing such as the confidence inspired by a leader, its effects are no longer to be dreaded.

Q. Is the moral effect only produced by unexpected causes ?

A. It may be produced by causes slow and continuous in their operation ; as, in the favorable sense, by the receipt of good news —rewards ; and, in the unfavorable sense, by fatigue, privations, the suspicion of treachery, continued losses under a cannonade,

the sight of the killed and wounded, &c. In this second case, the moral power of the leader is the grand resource, especially if it rest upon the *esprit de corps*, and if the diapason of the *soul* of the corps be at its highest pitch, and have been sustained at that for a lengthened period.

Q. What is to be done when good news is circulating in the ranks ?

A. You allow it to circulate. You even encourage it. Nevertheless, in certain cases in which it appears more than doubtful, you comment coldly and publicly upon it, in order that the effect subsequently produced by the falsity of it being ascertained may not make too great an impression.

Q. If it be bad news which is circulated ?

A. You summon before you the individual who has brought it, and interrogate him roundly : if you suspect that his design is to do harm, you punish the traitor in an exemplary manner. If this man be only a weak minded person, you rebuke him sharply, and send him to the rear on the first opportunity.

Q. If the round shot wound a great many men in your ranks ?

A. You hurry off your wounded to the field hospitals.

Q. If it kill several men ?

A. You make a slight movement to the front, or to the flanks, so as to conceal your losses by some natural curtain ; then you close up and re-count your files, and divert your men's thoughts by such means as you may have at hand.

A glass of brandy distributed at the proper time, a mistake committed by the enemy, which you point out ; the hope of soon charging to take your revenge ; the mentioning of wounds, which appeared serious, but were soon healed, because the man did not give way ; of brilliant actions rewarded ; of positions believed at one moment to be desperate, and which, recovered by courage and coolness, caused just rewards to be showered down upon the brave men, &c.

We were the first to enter Heilsburg, and there retook a great number of Frenchmen and our allies who, the evening before, had

been wounded and made prisoners by the Russians and Prussians. One of them, an infantry soldier, seeing us drinking wine, came up to us very gaily, told us how he had been taken prisoner, and drank with us. But all the wine, which he put within his lips, poured out upon him again. We looked at him ; he had a great gash in his throat, and it was through this aperture that the wine found its way out ; we remarked it to him, and he replied that it was a mere trifle, and cheerfully rejoined his regiment. I afterwards learned that he was perfectly cured. He did not give way.

At the affair of Pappa, we charged the Hungarian rebels and the Bubna cavalry. A non-commissioned adjutant of the 9th hussars received a sabre cut, which made a frightful gash in his neck ; his head fell on his neck, his eyes closed, and I believed him dead. He recovered rapidly from it, and was with us at Wagram. He was determined to live.

Near Tilsit, one of the 7th hussars, and of the troop to which I belonged, received twenty-two thrusts of a lance. A month afterwards he was on horseback. He had never for an instant doubted about his being cured.

At the affair of Raub, under the orders of General Monbrun, we manœuvred by the right, and drove back the Hungarian infantry by a change of front to the left. In the evening, we were at St. Nicholas, a village situated four leagues in advance of the field of battle. Under the hay, which I was carrying off for my horses, I found an Austrian foot soldier concealed : I brought him to the bivouac. He supped along with us, and made no complaint, when I observed a long bloody mark upon his white uniform. I made him strip. A ball had entered his breast, and was apparent to the eye near his kidneys. It was extracted by a simple incision of a bistoury, which cut the skin. This man had been wounded six hours previously and had walked four leagues on foot in four hours. What will not a determined will do ?

Below Kommorn, the Austrian cavalry surprised us by night. We drove it back. A Hungarian hussar had been run clean through the body. He was taken prisoner. A fortnight afterwards, he was about, and singing in our bivouac.

At Wagram, we charged the squares, General Colbert, whose aid-de-camp I had the honor to be, received a ball in his head at close quarters. This ball penetrated close to the right ear and went out near to the left one. Already the brigade mourned its intrepid leader ! But the ball had travelled round the skull. The same evening, he returned to Vienna on horseback and on the road was laughing along with us. Three weeks afterwards, he was completely cured. *

The moral and physical nature of a wounded man sensibly influences his sufferings. I have seen men undergo the most terrific operations, singing the while, and without even a change of countenance. Undoubtedly they suffered less in consequence than others.

There are men whom the battle field renders savage. We must check these dispositions when we fall in with them ; there are others whom the prejudices of infancy mislead and direct the noble instinct of compassion wrongly.

On the morning after the battle of Heilsberg, at daybreak, being on the main guard, we heard some musket shots fired, we mounted forthwith, and proceeded in the direction of the firing. What did we find ? A Corsican sharpshooter, who was putting the finishing stroke to such of the wounded as he conceived had no chance of surviving. We interrogated him, and were convinced that he did so from a motive of compassion. This was *his* notion of pity.

At the battle of Moscow (Mojaisk), a young cuirassier charges with his regiment against the Russian redoubt, which was in front of our left wing. The charge is brilliant. But the Russians retake the redoubt, and twenty of their light troopers throw themselves at the same time upon this hero. He refuses to surrender, kills the officer in command, and, covered with wounds, returns protecting the retreat of one of his officers commanding a squadron, like himself desperately wounded. The Emperor before our eyes gives him the cross of the legion of honor, and settles a pension of a hundred crowns upon his mother.

At Hodgstraten, ten leagues in advance of Antwerp, an officer of the lancers of the guard receives an order on the 1st January

1811 to attack at daybreak a horde (*pulk*) of Cossacks. He attacks in column upon a road, and, not deploying, really engaged with only his leading section. The enemy, penetrated in his centre, throws himself fiercely upon this section, which stands firm, sustains the shock, and resumes the charge. Our bold attack, our audacious hardihood, was followed by brilliant results. The emperor sends to this single section two crosses, and two officers' brevets.

The coolness, which allows a charge to reach it; which, by its calm bearing, impresses it with awe, and causes it to fail completely, is also to be observed, and cannot have a better moral comparison than that of a cat, which, attacked by a dog, stops its redoubtable foe short in his career, solely by looking steadily at him.

Some arms have a more imposing appearance than others. At Waterloo, our four regiments of guards happen to be in line together. The English charge this line. We others of the lancers put our lances in the rest: at this movement, the enemy spontaneously wheel clear of our front to throw themselves on those regiments which have short weapons.

Although I have already mentioned it in the chapter upon charges, I conceive that I ought here to repeat it that one of the most powerful means of acting upon the *morale* of the enemy, whom we attack, is not to draw swords or poise the lance until we are close upon him.

A trooper pursued, who feels that there is no parity between the swiftness of his own horse and that of his enemy, ought coolly to threaten his pursuing adversary with the muzzle of his pistol. This threat seldom fails to produce its effect. In a mêlée, where you are able to make a selection, never attack the man who shows most ardor and coolness.

The troops, which are the most easily demoralized by wounds, are the Austrians. This arises from their effeminacy and their white uniforms, which betray the smallest stain of blood.

We cannot pay too great attention to the wounded. We must render them prompt assistance, and commit them to the care of one or two men to take them to the field hospital. These men

having carefully fulfilled this errand of mercy, return rapidly to the brunt of the battle.

As there are two descriptions of courage, the one instinctive and innate, the other, reflected and acquired, so do there exist in rewards two actions, the double sentiment of which ought never to be separated by the leader, who bestows them: the first is that of justice, the second (and the most important) is that of example. Every chief, who distributes rewards ought consequently to weigh conscientiously the rights of each, and consider the deed more than the efforts.

It is very pleasant to reward merit; it is still more essential to make an impression on the mass by the example of reward. Let justice preside over this example, so that the mass may be excited by it instead of being discouraged; discipline and ardor are the fruits of the fulfilment of this law.

Let not reward be made to wait, when it is deserved: the bestowing it at the proper junction doubly enhances its value in the two-fold sense of the term.

The leader of every grade is judged by the first impression which he makes. Let this leader, for the sake of his moral power, never forget this, and let him consequently so order every thing at first as to have nothing to amend hereafter. The dignity and power of command depend upon it.

An officer must never allow the soldier to say of him, "He is a good youth" (*C'est un bon enfant*), because "weak" is thereby meant; but rather, "He is just, he is humane, he is the father of his soldiers; but we must never fail him, for he fails nobody."

A commanding officer ought to see every thing in his regiment at a glance. He knows before hand the good and the bad characters, and consequently those who will perform their duty properly or otherwise. The moral knowledge which he has of his men classifies and infinitely simplifies this inspection.

Let not this knowledge, however, have the effect of rendering him unjust.

The commandant ought to set great store by the man who corrects his errors.

Often a man conceives that he has concealed something from the eye of his commandant; let him undeceive himself; he sees, but he winks at it wittingly. Let him nevertheless watch over himself, and correct himself, for, on the day in which he will prove that nothing has escaped him nor does escape him, he will be roughly disabused of the error, into which he fell as to his commandant's blindness.

Let a commandant correct himself of a ridiculous habit, as of a vice.

The success of a body of men, throughout a campaign, depends almost invariably upon the manner in which it has acquitted itself in its first affair. If the leader allow it to be beaten at the commencement, the bond of confidence is broken, the charm is dissolved, and it will require very unforeseen and fortunate circumstances to restore the equilibrium and ardor.

If, on the contrary, this body has been skilfully handled in action; if it has converted the enemy's strength into weakness; if it has made its own teeth felt, without being bitten, there is no more room for apprehension: you may, with every confidence, engage it in the most difficult expeditions: it will emerge with glory from them all.

The well merited reputation, which a body of men acquires, is rapidly bruited through an army. If you have the honor to belong to this distinguished regiment, the exaltation of your self-love will know no bounds. I have seen corps cheered by a whole army. "Bravo!" resounded from all sides the moment it appeared in line! The men broke from the ranks to grasp the hands of their heroes! And what animation did not their presence inspire! "It goes along with us?" was the cry, "forward—victory is certain!"

And if the wounded of this regiment were carried to the rear, the contest was as to who should strip himself for their comfort!

The reputation of a corps is established not only in its own army; the enemy himself is subjected to its influence; it terrifies him, demoralises him, and renders him incapable of defending himself, at the simple sight of the uniforms! And how often, especi-

ally in light cavalry, does not this power become gigantic, when appreciated at its full value, by a skilful leader! As soon as the enemy trembles, he is our prey. You may attempt any thing! Press him, penetrate him, carry off his guns, and his generals, make his squares surrender, rout him thoroughly—you can accomplish any thing—there are no limits to your success!

NOTE.—That temperament has a great influence in accelerating or retarding the recovery of a wounded man is unquestionable, and the sanguine has abundant advantage over the melancholy and desponding disposition. Still, it would not have been out of place had the author made a reference, however slight, in relation to this subject to the great Disposer of events, instead of investing the human will with an omnipotence as to the issues of life and death. (Trans.)

CHAPTER XXVI.

OF SKIRMISHERS AND FLANKERS.

Q. What do you understand by skirmishers and flankers ?

A. The advance guard of a body in a movement either of attack or retreat. That, which first meets the enemy offensively, throws down the glove to him, presses him, threatens him, gives him no rest, disturbs his thoughts, hinders him from surprising our troops, or ascertaining their strength, which nullifies the effect and the results of serious attacks, which supports the retreat, that, in fine, which encloses, like the pawns of a chess board, our first line with a vigilant and protective network.

Q. When do you send your skirmishers out to the front ?

A. Every time that I fall in with the enemy.

Q. Ought they to fire as soon as they perceive that they have him within short range ?

A. They ought never to fire until ordered by their commanding officer.

Q. And when their ammunition begins to grow low ?

A. They ought to send to the regiment for a fresh supply ; for their fire, once opened by order, ought never to be slackened.

Q. Upon what do they cease firing ?

A. Upon the order of their commandant, and, for whatever reason this may be issued, they ought not to fire a single carbine or pistol shot after it.

Q. What precaution should a skirmisher take in firing ?

A. Always to fire within good range, and to take a correct aim.

Q. What ought to be the posture of a skirmisher on horseback ?

A. The horse being properly girthed, the trooper will wear his

shako firmly held on his head by the chin strap, his cloak being rolled up and crossed over his breast, his stirrups short, so as to enable him to rise in them; thus gaining a greater sweep in his cuts, and not being embarrassed in them; his spurs close to his horse's flanks, so as to enable him to turn him sharply; his knees close to his saddle, the small sling of his sword very short, so as to enable his hand readily to grasp its hilt; his holster pipes uncovered; the forepart of his shabracque touching his thighs; his carbine in his hand.

Q. I thought that it was necessary that the sword should be attached by the sword knot?

A. This is a theoretical error, against which you will do well to guard. If you do not wish to embarrass your movements, wound your horse, and cut your own knee or pierce your foot.

Q. And when the skirmisher is threatened with a charge?

A. He must quit his carbine, shorten his reins, draw his pistol from the holster, put it in his bridle hand, which holds it horizontally between the thumb and forefinger, draw his sword, and wait for, or anticipate, the charge.

Q. And if the charge takes place?

A. Receive it with his sword. If he find an opportunity of discharging his pistol, fire that shot, letting his sword for an instant hang by the sword knot, throw his discharged pistol into the left hand, as I have pointed out in the chapter upon arms, and skilfully recover the grasp of his sword. The charge over, return his sword, reload his pistol, and return it to the holster pipe, and recommence skirmishing with his carbine, always taking especial care to pick off the officers in preference.

Q. What precautions ought the skirmisher to take?

A. I have pointed out in the chapter upon arms all those which pertain to him. The skirmisher, when he has been unable for a lengthened time to dismount, ought to feel whether his saddle is always firmly retained in its proper position; and, in case of his girths growing slack, to order his movements in such a manner that it shall not slip round, when wheeling about too sharply

Q. Ought not a skirmisher always to retire by a left about wheel?

A. Theory, in directing you to act thus, wished to point out to you that you should always wheel with your sword hand towards your adversary. To push the induction beyond this would be a dangerous error. In fact, admitting a case, which often presents itself, that in which a skirmisher charged is passed on his right hand, would he wheel to the left about, so as to allow of his enemy taking him on the flank, which he would present to him? No: he should wheel about rapidly to the right, follow his enemy in the rear, and endeavor to take him on the left flank.

Q. And if he overtake him?

A. He would deliver him a thrust in the left side. If his enemy neither fall nor surrender, he would repeat the dose. If by the too rapid movements of his horse, he should go past this enemy, he should give him a back handed cut across the face. The enemy having surrendered, he will make him throw down his arms; and, seizing his horse's reins, lead him off rapidly to the rear.

As a general rule, every time that we are pursuing an enemy, we should press him closely, taking him on his left flank, because this enemy, being then defenceless, is at our mercy, if our horse has better legs than his own. In fact, we have that advantage over him, which he does not possess in relation to us, the whole length of our weapon and of our arm. If this enemy, aware of his awkward position, endeavor to wheel sharply to the right, we will take him in the act of doing so, and, by forcing the chest of our horse against the flank of his, we are sure of capsizing him without the slightest exertion.

In every attack, the power of the trooper consists wholly in the correctness of his eye, and the coolness of his judgment.

Q. What should the skirmisher do, whose carbine unhooks and falls to the ground?

A. If the enemy be close at hand, he ought to make use of his pistol for the nonce, and not pick up his carbine until he is at a distance again.

Q. When the skirmisher has taken his place in line, ought he to stand still?

A. He ought to make easy careers, especially to the flank, when he loads his arms, and when he is near to his enemy.

Q. Why so?

A. Because he thereby prevents him taking as accurate an aim at him as he would do, if he remained steady.

Q. Ought a trooper dismounted in a charge to look upon himself as lost?

A. Not if he preserves his coolness, and possesses a firm resolution not to be taken.

Q. What ought he to do in that case?

A. That entirely depends upon the position of the charge, and his own especially. He ought, in certain cases, as soon as he is on the ground, endeavor to remount. If he cannot, he should shelter himself behind his horse, or take a firm hold of the tail of the horse of one of his comrades, who will slacken his pace a little, and thus extricate him from the mélée, whilst the other skirmishers briskly cover his retreat.

If this be not possible, he will throw himself at full length upon the ground, especially if the enemy be not armed with lances, and counterfeit death. Don't let him be afraid of the horses, they will clear him by leaping over him.

The charge over, if he find himself upon the ground occupied by the enemy, but within sight of his own men, he will judge by a glance the nature of the surrounding country; and the nearness and strength of his own party; and, finally, whether he has a prospect of making his escape by rapidly gaining, in its sight, a ditch, a ravine, or a wood. Then, if this survey be favorable, he will dart off in the direction of the ravine, the ditch, or the wood, throwing away the scabbard of his sword, and retaining only his blade in his hand. If the enemy's troopers make towards him, he will avoid them by wheeling, lying down, striking their horses on the head, or thrusting a trooper through, whose horse he will have stopped by seizing the bridle with the left hand, and, if he dis-

mount him, he will spring into his saddle. He will thus afford time for assistance to come to him.

If these chances do not present themselves, and if his defence can only be useless, he will surrender. But from that very evening he will endeavor to escape, especially if he be in a friendly country, and the enemy, who has captured him, be retreating.

In the campaign of 1809, we happened to charge the Austrian *hulans* of prince Charles. A non-commissioned officer, of the twentieth chasseurs, had been taken prisoner by them, and was being led to the rear by a *hulan*, who led both the horses. This non-commissioned officer, meditating on the means of making his escape, perceived all of a sudden upon the field a pistol that had been dropped. It is loaded, and he is at once armed. To seize it, shoot the hulan dead, and return to us with both the horses, was the work of an instant for this brave non-commissioned officer.

The morning after the affair of Wagram, the young Lorain, a second lieutenant of the twentieth chasseurs, took an Austrian officer prisoner, whom he led to the rear with all the sympathy due to misfortune, and after having received his parole that he would not attempt to escape. The troopers of this officer charge Lorain, who is obliged to think upon a rapid retreat, but his horse stumbles, falls, and regains his legs immediately. Lorain, pitched out of his saddle and dismounted, shelters himself behind him to defend himself, when the Austrian officer, unmindful of his parole, seizes him from behind, in order to dismount him; the young Frenchman breaks his jaw with a pistol shot, then wheeling around his horse, and making use of him as a rampart, thus gains time, and our people save him, and recapture his prisoner.

A vast number of individuals are made prisoners because they lose their presence of mind and courage, and because they do not properly appreciate the means of deliverance still at their disposal.

Every time that a trooper is dismounted, his comrades ought to hasten as much as possible to protect his retreat. Some of them will attack the enemy; the others will divide amongst themselves the arms, the equipments and saddlery of the dismounted man, and others will assist him to walk.

Q. *When skirmishers at open order proceed to the front, what ought they to observe?*

A. To form their line properly, so as not to leave too wide spaces, through which the enemy might slip; not to leave one of their files unprotected; not to draw out their line and uselessly cover too much ground, which would diminish their strength and compromise their flanks.

To form a line always parallel to that of the enemy, to conform to him, as it were, mathematically, calculating all his movements with reference to them.

To observe carefully, and in succession the ground which the enemy occupies or abandons, so as to be at no loss when they find themselves upon the same spot.

To guess before hand the general and particular features of this ground by the undulations, and breaks in the line of the enemy's skirmishers as they retreat.

To have a perfect recollection of the ground which they have passed over. This minute observation is so much the more useful, if they cross rivulets half dried up, ravines, defiles, so that they may not be bewildered in a hasty retreat, and rush into a *cul-de-sac*, from which there is no exit, and wherein they will infallibly be captured.

To gain, as far as possible, the highest portions of the ground, in order to command a more extensive view, and reconnoitre the dispositions of the enemy more fully.

To give rapid intelligence as soon as one of them perceives large bodies, of which they had not been previously cognisant, forming an ambuscade, preparing for, or making, any movement, offensive or defensive.

If a skirmisher observe, without being himself noticed, he will halt, and continue his observations without showing himself, and will not move a foot, until his officer, to whom the intelligence has been conveyed, comes in person to reconnoitre, and furnish him with fresh instructions.

If the skirmishers conceive that the enemy would fall a prey to a rapid movement, and that his retreat would be a moot point, if a

prompt attack were directed against him, they will anticipate him, and, at the same time proceed vigorously to the front, in order to throw him into confusion, and profit by it to make prisoners.

If the artillery is compromised, they will direct themselves against it in preference.

Q. In the case of a retrograde movement, do the skirmishers effect their retreat in the manner laid down in the regulations?

A. When theory laid down that the retreat should be effected by alternate files, it wanted to have a methodical and pretty manœuvre for the parade ground, which should inculcate upon the troopers that, in a retreat, they should mutually support each other, and not break the unity of their alignment. We must therefore gather from this order no more than its predominant idea; but not to hamper ourselves in the field by a strict adherence to a movement, which is impracticable and would be dangerous.

When a line of skirmishers has to retire, it would not be the odd or even numbers which should commence, or continue, the retreat; but it should cause the weakest horses to file off first, in order to have the best mounted troopers with the rear guard. It will endeavor to retire one half of its line as equally as possible throughout its whole extent.

Q. If one of our men be cut off from our body by the enemy what should he do?

A. If he be well mounted, and see too many ticklish chances against his joining in a straight line, after having thrown away his carbine, placed his sword horizontally in his bridle hand, the blade retained by the thumb upon the forefinger, he will proceed in a contrary direction, and husbanding the strength of his horse, and presenting the muzzle of his pistol towards his pursuer, he will make a circuit, approaching his own party, whom he will quickly rejoin, for, especially if the country be intersected, the enemy will not follow him for any length of time.

The march of skirmishers, barring orders to the contrary, is always conformed to that of the body which they cover. They ought invariably, as much as possible, to keep at the same distance from this body, whether they proceed to its front or rear. Neverthe-

less, when they are covering a retrograde movement, they ought to seize all the defiles, and be careful so to pass them as not to allow any of their body to be captured by the enemy. Let our skirmishers, then, keep their eye constantly on the enemy, but at the same time upon our movements. This double attention is indispensable for their duties being carried on with any degree of usefulness, and for their own safety in acting.

They will gradually close in their line, when approaching a defile; then, in order to avoid being hampered, they will make a portion of their men pass rapidly through, who will immediately line the opposite entrance, and, facing to their front, will keep up a sustained fire upon the enemy, so as to protect the retreat of their comrades, who are still engaged. If the body, which they cover, continue its route, they will rejoin it by accelerating their pace.

The more rapid the retreat, the more extensive should be the line of skirmishers. It is even necessary, in order to establish more order, and consequently greater facility of manœuvring, when the narrowed front of the defence compels us to have a more limited number of skirmishers, to double up those who are not required in sections, and order them to join the supporting body.

If, in this manner, we gain a road, we must leave only a few skirmishers as a rear guard; for otherwise it would happen that a greater number would crowd together, and undoubtedly wound each other in delivering their fire.

We must direct the skirmishers to direct their fire against masses, because, by so doing, a ball, which misses its object, has chances of not being thrown away. We must also consequently direct our skirmishers always to proceed at extended order, because thus they are less exposed to the aim of the enemy.

When the order has been given to cease firing, and to retire, the men are expressly forbidden to disobey it, even were they certain of succeeding in an attack. Oftentimes, troopers, through an excessive courage or fool hardiness, continue the action: they must be severely punished, and, if they fall again into the same fault, we must retire and leave them to their fate; because, very often in order to support them, we recommence an action which keeps a whole

army on foot throughout the day, and needlessly harasses it; and ten thousand men are compromised for the sake of one rash individual.

Q. How does a skirmisher charge?

A. I have pointed this out in the chapter upon charges.

Q. If our troopers skirmish against infantry, what ought they to do?

A. Endeavor to attract it into an open plain, then charge home, and, separating it from its supports, cut it to pieces.

The cossack skirmishers often close together for a charge; but disperse in retreating.

Our skirmishers almost invariably do exactly the contrary, whatever may be the facilities offered. The cossacks are right and we are wrong. In fact, how often have we not seen our troopers, when retiring, rush one upon another in such a manner as to deprive them individually of the use of their arms, hampering, and arresting their progress, and thus, by still further retarding that of men not so well mounted as themselves, and keeping them to the rear, have been the means of causing these poor wretches to be cut down and taken prisoner, their backs answering as a shield to their guilty comrades.

A too crowded retreat is always put to the sword, for two very simple reasons: the first is that the troopers, who are retreating, by crowding excessively together, paralyse their individual means of defence, and render both the halt and the wheel about impossible; and the second is, that the attacking trooper, who has only one object in sight, and who is not at all harassed upon his flanks, hurls himself forward with all his impulsive force, and all his audacity upon this unresisting mass, which he hacks and hews in perfect security, and can drive before him as far as he chuses.

This is not the case with a retreat in which the men scatter as they go. A man, who retreats in this fashion preserves all his defensive power. He is equal in all points to the attacking party, who takes care not to rush recklessly upon him, because his flanks are threatened, his attention diverted, and the danger equal on both sides. A retreat, conducted in this manner is never so vigorous,

ously pressed nor so far pursued. The slowest horses will perform it as well as the swiftest : it disturbs the attacking party, stops him short just when he might have obtained the advantage, and it can wheel round and resume the offensive. Polybius tells us, in his description of the passage of the Tr̄ebia.* “ Nevertheless Sempronius caused the retreat to be sounded, in order to recal his cavalry, which did not know how to manœuvre against the enemy in its front. In fact, *it had to deal with the Numidians, whose custom was to retreat scattered in different directions, and to return vigorously to the charge when the enemy least expected it.*”

Q. Ought the orders to the skirmishers always to be given by note of trumpet, as the regulations prescribe?

A. Eschew the practice altogether, unless (which is a rare circumstance in war) you are upon a perfectly regular ground, that you have only a general movement to perform, and that you do not wish the enemy to know your plans as soon as yourself.

Skirmishers are essentially irregular in their movements, the order of which is conformed to those of our army, and those of the enemy, but especially to the outline of the ground. The trumpet sounds, laid down in the regulations, numerous as they are, would not half suffice you, if you gave no orders but according to them.

Of what sound, for instance, would you make use, if you wished to refuse the right wing, advance the left, change front, keep your centre back, &c. &c., and fifty other movements, the necessity for which is occurring at every instant ?

Supposing that our skirmishers had been too much pressed by the left, if you were to sound the retreat, the whole line obeying it, not only would you in no wise restore unity of movement, but you would run the risk of committing a very serious error.

As a general rule : never make use of the trumpet except in those cases, which are exceedingly rare, in which you desire to attack or retire all together. But every time that you may have only partial orders to give (which will be of constant occurrence)

* A river of Cisalpine Gaul, rising in the Apennines, and falling into the Po, to the west of Placentia. (Trans.)

send them by a non-commissioned officer, or deliver them in person.

Let these orders be simple and brief. For instance : " Order serjeant Gueridon to halt his men until the right of those of serjeant Mozet have arrived at the angle of the little wood.

Order serjeant Connois to retire as far as the rivulet, to cross it, and hold it until further orders.

Direct serjeant major* Chabrier to collect his men, and oppose the passage of the small bridge.

Desire the left wing not to put itself in motion until it perceives me crossing the high road.

Say that, if I sound the retreat, Seyssac will recross the ravine close to the field of amel corn ; Piat, close to the mill ; Carlies, near the three poplars, and that they draw up in firm array to the rear.

Tell Monsr. Cardon that, as soon as he sees the retreat commencing, he is to call in his skirmishers, without sound of trumpet, and proceed at full trot, in a direction close to the farm, where he will take up his position, &c.

Let a commandant of skirmishers then pay great attention that the sounds which he orders are opportune ; for otherwise he may not only cause his own men to commit a mistake, but lead others astray who are not under his orders.

A skirmisher should be able to fathom the enemy and penetrate his designs

If this last displays only a handful of men, and his skirmishers are scattered at wide distances from each other, it is probable that he has troops of support concealed.

If he extends himself in a decided manner by one of his wings, he is undoubtedly preparing to make either a real or a false attack.

If he closes up his skirmishers, whilst retreating at the same time, he either designs to pass a defile or attempt a charge.

* We have preferred interpreting *marechal des logis* as serjeants, instead of quarter master, and *marechal des logis chefs*, as serjeant major, as being more consonant to the respective duties of these officers, an arrangement which we adopted in the translation of Lespinasse. (Trans.)

If he refuses one of his wings without any apparent motive, his object is to entice your troopers, who are fronting that way into a false step. If he refuses his centre, his intention is to surround you.

If his skirmishers disappear all of a sudden, distrust the movement: halt at once, and ascertain as soon as you can the reasons of this sudden disappearance: it is possible that it only precedes by a very short interval a serious attack upon your centre or upon one of your wings.

There are individual *ruses*, which I have seen employed by skirmishers, and which often succeeded.

At the commencement of our Polish campaign, our dragoons had the worst of it with the cossacks: this was to be traced to the fatal theory of a celebrated general. The cossacks, emboldened by their success, attacked these troopers with fury and confidence. Our cuirassiers had white cloaks, as well as our dragoons: we made them put them on, and then posted these cuirassiers in the first line. The cossacks, believing that they had the dragoons to deal with, charged them with impetuosity, and found themselves cruelly mistaken. The dragoons, having been reorganised in a rational manner, faithful to their ancient and brilliant reputation, shed lustre over our arms in Spain, and, in the following campaigns, took the most terrible and glorious of revenges.

I have seen our hussars when an enemy's skirmisher had just fired, counterfeit to be killed or wounded. The enemy, seeing them fall forward on the pommel of their saddle, galloped up to take them prisoner; but these, resuming their erect posture, and firing at close quarters (*à brûle pourpoint, singeing distance*), made prisoner both man and horse.

It is not a matter of indifference for an officer of tirailleurs to understand what sort of enemy he has to deal with. In every army, notwithstanding the successive renewal of the *personnel*, there are certain regiments, whose ancient and well earned reputation has never degenerated. Of this number, for example, in Russia, Austria, and Prussia, are the cossacks of the guard, those of the Don, the Blanckstein hussars, the de la Tour dragoons, the Mer-

feld hulans, some regiments of Prussian dragoons, the black hus-sars, &c., &c., who carry on the duties of advance guards more skilfully than others. Other names, since the peace, have been en-grafted upon those by which they made themselves celebrated in our wars, because in Germany the regiments are known by those of their colonels, but the stock is the same, and war has not un-baptized them for us. Our old soldiers, when they see again the red waistcoats, the blue pantaloons with red stripes, the red shakos, the sky blue pelisses, the green and amaranth jackets, the yellow schabbski, and the black, and sky blue, dolmans, will recognise the ancient and brave regiments that wear them, and will manœuvre accordingly.

CHAPTER XXVII

OF PRISONERS — OF DESERTERS

Q What is a prisoner?

A As long as a man has possession of his arms, he is not a prisoner. As soon as he has thrown them down, he belongs to you, and is entitled to your complete protection, which ought to be as active and fraternal as possible. To maltreat a prisoner is unpardonable cowardice. You should treat him, as you would desire to be treated yourself under similar circumstances.

Q Is not a Frenchman too confident with reference to his prisoners?

A Yes, because he often persuades himself that the enemy, whom he has passed by, and has thus cut off from his comrades, is on that account a prisoner. This is a mistake, the enemy is not a prisoner until he has thrown away his arms to a distance and is incapable of picking them up again.*

Let the lancers, when they charge, not spare infantry lying down, or dismounted men, who have not surrendered, let them give them a thrust as they gallop forward, and another, as they retrace their steps.

Let the trooper not forget that every solitary foot soldier, who on an open plain, turns his back to him, is as good as taken, if he chuses to charge him.

Q When you capture a trooper, what do you do?

A. You desire him to throw down his arms, you then seize the reins of his horse, and lead him rapidly to the rear of the field

* The question ought rather to have stood thus “Is not a Frenchman too hasty in *considérant* that he has made his enemy a prisoner?”, for the answer is like the celebrated Irish one, and shows that he has made no prisoner at all, but we give it as it is in the text (Trans.)

of battle, to present him immediately to your colonel. There the prisoner dismounts, he is interrogated by the officer in command, and formed up with other prisoners made in the action, and forwarded under an escort to be handed over to the infantry.

Q. To whom does the prisoner's horse belong?

A. To the man, who made him prisoner. He ought to offer it first to the colonel, and then to the other officers of the corps, and sell it on the spot, so as to rejoin his squadron immediately.*

Q. Do you not pillage the prisoners?

A. Yes, unfortunately we do. It is a humiliating custom, which it has been impossible to root out of any army. It would be worthy of Frenchmen to abolish it. But, in fine, since it does exist among common soldiers, and since further, by impoverishing the prisoner, it deprives him of one means of escape, and of selling us to the enemy, we must only insist upon it that the trooper wastes no precious time by plundering his prisoner during a charge, and thus compromise both his personal and his relative position.

Q. When you take infantry prisoners, what precautions ought you to take?

A. Break their musquets.

Q. When a horse, that has been captured, will not allow himself to be led to the rear, and there is a probability of the enemy retaking him, what should be done?

A. Blow out his brains, taking care that we fire in such a manner that the ball, if we miss him, as it glances off his skull, does not kill or wound any of our own people.

Q. When there are good horses captured, and the officers, being well mounted, do not require them?

A. The colonel should purchase them for the corps, and transfer them to the ranks, instead of concluding this purchase at a later period.

* With us, it would form a part of the general prize property. We do not know but that the French plan is the better, as holding out an inducement to individual acts of heroism. (Trans.)

Q. If the regiment have no dismounted men?

A. If the horses captured are considered much superior to some in the ranks, the commander ought not to hesitate to abandon the bad ones in his possession for the good ones which are brought to him, the first duty of a colonel of light cavalry being above every thing to command men well mounted, and on that account ready to move any where and to undertake any thing. If this colonel, however, have wounded men, he mounts them upon the indifferent horses, who take their way towards the led horses, and small dépôts.

Q. Must we throw away the trappings of the captured horses?

A. They must not be thrown away, until after we have extracted from them the portions required for the speedy repair of our own saddlery.

Q. When is it excusable in a trooper to surrender?

A. Never, as long as he retains his seat, even were he grievously wounded; a man on horseback can go any where.

Q. When one of our men is taken prisoner, should we endeavor to recapture him?

A. Yes, if the chances of retaking him be at least equal to those which the attempt may cost him. In a charge, we should not hesitate; but, when not charging, we must calculate and act promptly: if the man taken be not wounded to such an extent as to weaken him, if he be known to be vigorous and enterprising, if he be indifferently guarded, if the ground be intersected, favorable to his escape, &c., we ought to endeavor to recapture him. If, on the other hand, he be wounded, and known to be effeminate, dull, stupid, and the enemy carry him off over level ground, it is imprudent to attempt it, for the effort that we shall make will not be seconded, and, we shall have reason to apprehend that the enemy will kill his prisoner rather than allow him to be recaptured.

Q. When a deserter gives himself up to you, what should be done?

A. Order him to lay down his arms, take the bridle of his horse, and lead him to the colonel.

Q. If the enemy endeavor to recapture him?

A. We must strain every nerve to enable him to effect his retreat to us in safety.

Q. *Have you any right to plunder a deserter?*

A. No: his horse and his effects belong to him: his property is under the safeguard of his own dishonor and our contempt for his character.*

* This is a fine and chivalrous sentiment, well worthy to be borne in mind. If every deserter were treated with the scorn, which his baseness deserved, the crime would be exceedingly rare. (Trans.) . . .

CHAPTER XXVIII.

OF SURPRISES AND AMBUSCADES.

The peculiar property of skill joined with promptitude is the surprisal of the enemy.

The effect produced by surprise is demoralization.

The warfare of advance posts is a series of surprisals.

The officer, who, with even inferior forces, the oftenest surprises his enemy, is certain rapidly to destroy him.

Nevertheless, although this term "surprise" designates very nearly the whole of the offensive warfare of advance posts, we shall limit ourselves to speaking, under this head, of that which it has been agreed to call more especially by this name.

Q. What is a surprise?

A. An unexpected attack.

Q. What ought to be its character?

A. It cannot be too prompt and decided.

Q. What precedes it?

A. A rapid march, or an ambuscade.

Q. What is an ambuscade?

A. A body concealed in position.

Q. What is the best ambuscade?

A. That which the enemy can the least foresee or guard against.

Q. Ought it always to be upon the same road which the enemy takes?

A. The less time that it takes to rush upon the enemy, the better it will be. Nevertheless, there are cases in which it is indispensable that it should be placed at some distance.

Q. Which are they?

A. Those, for instance, in which we wish to attack the centre, or rear of a convoy which is entangled in a defile. It is probable

that the enemy, before entering this dangerous place, will investigate its entrance ; but, especially if he have been marching for a considerable distance, his researches will not extend beyond a certain distance. Let the ambuscade then be placed beyond the radius of this investigation, which may easily be preconceived.

Q. Are there then two descriptions of ambuscades ?

A. Yes. We may term them, instantaneous, and combined.

Q. Give me an example of the first of these ?

A. At the commencement of 1811, we fought under the orders of General•Maison, whilst retreating from Breda upon Antwerp. Already we perceived the steeples of this town. The enemy's advance guard pressed our rear guard so closely that the infantry, cavalry, and artillery of the two armies were intermingled, and fought corps to corps.

Two of our pieces were on the point of being carried off. Reckinger, an officer of lancers of our regiment, found himself with the extreme rear guard at the head of a dozen troopers ; he took his resolution on the instant, and disappeared at the turning of the road where there were a few houses and a garden. Our infantry, pell mell with an infuriated enemy, continues its retreat, but, overwhelmed by numbers, loses its pieces. The enemy shouts "victory," collects around the guns and the horses, and carries them back : then the intrepid Reckinger issues from his ambuscade : in three minutes afterwards, the pieces and the Prussians riding upon them were our's.*

Q. What do you term combined ambuscades ?

A. Those which are laid down before hand ; which partake of a movement in which one has time to reflect and to calculate, thus, for instance, if, commanding an advance guard strong for offensive operations, and being thoroughly acquainted with the ground over which I purpose driving back the enemy, I were aware that the

* Reckinger, a second lieutenant of the red lancers of the imperial guard, was rewarded with the cross of an officer of the legion of honor. His appellation of "the brave officer of the guards" was one of reprobation under the restoration, and Reckinger died a few years ago at Paris in the service of an individual who let out cabriolets for hire. (Author.)

flanks of his column might be attacked partially upon such and such points, I should make the troopers, designed for these attacks, proceed in advance, I would desire them to form an ambuscade on such and such a rising ground, agreeing before hand either upon a signal or the hour of attack, and I would combine my offensive movement with their's.

If the *strength* of ambuscades lie in the suddenness and the determination of their attack, their *science* is subjected to two indispensable conditions, a perfect knowledge of the enemy, and a perfect knowledge of the country.

In fact, in order to surprise the enemy, we ought to be thoroughly acquainted with his strength and the dispositions which he has made. In order to form an ambuscade, it is necessary not only to select a suitable spot, but to reach it without having been perceived, and without affording the slightest suspicion of one's march.

§ A body of men proceeding to place themselves in ambuscade ought therefore to march compact and in silence by the roads which afford the most cover.

I cannot deny myself the pleasure of quoting an example of ambuscades on the grand scale.

In 1812, we arrived before Smolensk ; the enemy had entrenched himself there. The weather was superb. Our army in bivouac crowned the heights which overlook the town. The emperor orders General Morand, so justly celebrated, to carry the suburbs. We see this intrepid division pass down a ravine, turn to the left behind a small rising ground, and form, in close order and unperceived by the enemy, below a mill. All of a sudden, as if by enchantment, this division is hurled against the town. In the twinkling of an eye, suburbs, artillery, advance works, all are in our possession ! And our whole army to a man clapped their hands ! I have never in my life seen a grander spectacle, nor any thing which has left a deeper impression upon my mind of the majesty of war, and the power of genius and courage !

The situation to select for an ambuscade depends more or less upon the clearness of the day or night. When the shade of a fog,

or the night lends its friendly aid to conceal you, you need no other screen, but then it is necessary that it should be impenetrable. When this is not the case, a wood, a rising ground, a ravine, walls, must serve the purpose of concealing you from view; always calculate their height and their depth, so that the line of the visual ray of the enemy cannot fall upon you, and perceive the tops of your shakos and the points of your arms. The least imprudence of this sort will betray you, will lead to your destruction. Remember the fable of the hare, which thrust its head into a hole, and, because it was no longer able itself to see, believed that it was invisible.

Often also the impatience of the troops in an ambuscade causes it to fail. "Are they coming?" is the question that runs through their ranks, and one inquisitive fellow steals to the edge of the wood, or raises his head above the wall, or calls out aloud. From that moment, the fruit of your troubles and your fatigues is lost; you are recognized, and often exposed to very great danger.

Bear in mind that a body of troops concealed is almost always an unreality* and in a critical position; that it risks, so to speak, every thing for every thing. A detachment of this sort, composed of fifty men, which, if well commanded, and controlled by patience, might have carried confusion into a column ten times its number, and made a most important and decisive diversion, if it be perceived, is lost.

The place of an ambuscade ought always to be a fortification, so to speak, shut at our pleasure on the side nearest the enemy, and open on the side of retreat. The ground between it and the enemy ought to be favorable for a gallop; that, over which we retreat, thoroughly known, and calculated for our forming line in case of reverse.

I am here speaking only of those ambuscades which are composed of few men, and which, notwithstanding every precaution, may have warmer work cut out for them than they anticipated.

* "Est presque toujours en l'air"; o. i. that its chances of success are as uncertain as building castles in the air. We know of no precisely corresponding aphorism in the English language. (Trans.)

As to those, which are of superior strength, they have only to be careful of one thing, and that is, to conceal their presence, so that no enemy may escape. After success, they have time to decide either to go forward, or to retire by such or such a road, either of which they know equally well.

To sum up ; we agree that ambuscades are established for the purposes of carrying off a reconnoitring party, of attacking columns or convoys ; of checking a too venturesome advance guard, of cutting off and destroying a rear guard that is too weak, of surprising a bivouac that is too confident, works that are badly situated, and the interior of which has been scanned, and of troops badly drawn up and exposed upon the field of battle. It is equally agreed that the science of these ambuscades consists wholly in the knowledge that we have of the enemy, in the selection of the site where we establish ourselves, and the secrecy of our march to reach the spot.

The night is the most favorable time for ambuscades, but it is not the only thing that favors them : the season must also be taken into consideration, and furthermore, cold, snow, rain, and a high wind, are of advantage to them.

Q. Wherefore?

Because, by reason of the cold, the party attacked is less prepared, and not so easily handled : their cloaks, almost invariably worn, render their sense of hearing less acute. The rain damp^s* their priming and prevents their pieces from going off. A high wind favors the march, especially if it blow from the side of the enemy, because it prevents the tread of the horses from being heard.

If you have a surprise to effect, profit by what has been thus pointed out.

Thus, if you can choose your road, keep your enemy to windward of you.

Especially if you surprise infantry, select the time when it is raining.

If you make a night surprise, wait for the moment when, the

* This hardly holds good, since the introduction of percussion locks ; the rain, however, will render the progress of the body more inaudible than any other cause, whilst by softening the ground it at the same time deadens the tread. (Trans.)

reconnoitring parties having just returned, there will be less vigilance exercised, and sleep will be more profound.

Q. In surprising a bivouac by night, what should we do?

A. It is a proper precaution in a leader of an ambuscade, before making a night surprise of a bivouac, to make his men wear, and wear himself, a token whereby they may be recognised, such as a handkerchief around the left arm, a branch of a tree, or the feather from his shako, &c. ; this token should be more easily distinguishable in proportion to the darkness of the night.

Using this precaution, which will be so much the more useful when the enemy wears a dark uniform and of the same cut as our own, we shall avoid cutting down our own people. This having been done, the leader explains, not only to his officers, but to all his men, his plan of attack, and points out two lines of retreat ; the one by the road which leads most directly from the enemy to our army, and upon which are the main guards of the enemy, whom they will cut down and take prisoners, as they pass ; and the other, by the road which was followed to reach the ambuscade. •

He further settles upon four trumpet-sounds, which are the shortest, and to which the ear of the soldier is most accustomed.

The first is to represent "Cut down—make no prisoners."

The second, " Make prisoners."

The third, " Retire by the most direct road."

The fourth, " Retire by the road by which we came."

At the two last sounds, the tokens of recognition ought to disappear, and the retreat be rapidly effected, and the detachment reform after having got clear of the village.

At Atsk, below Komorn, in Hungary, we were surprised by the insurrection. The token of recognition, which its hussars had assumed, was the white cloak unfolded. It served to give a great deal of combination to their attack, which succeeded remarkably well. But, when we had recovered from our surprise, this token was fatal to all who wore it. Their body perceived this, and lost no time in abandoning it. This resolution protected its retreat, and our regiments were close upon engaging with each other, mutually mistaking one another for the enemy. .

A night surprise may be more or less hazardous: by this, I understand one which is undertaken by a body which is not supported, and which finds itself considerably inferior to the enemy in point of strength. A surprise has always one object more special than the rest; either to alarm the enemy, or to destroy him, or to effect both at once.

Supposing that the surprise party is weak in numbers, and that its special object is to strike terror into the enemy, it must make a liberal use of its pistols; its attack should be prompt; its men should shout, gallop hither and thither, make no prisoners, and effect a rapid retreat.

If, on the contrary, the surprising body is supported, and in considerable force, and its object is to make prisoners of the enemy, it is necessary that it should maintain silence, manœuvre, and seize in an orderly manner upon important points, such as the barrack room, or quarters of the colonel, the entrances of the bivouac, of the village, &c.; and carry off forthwith the horses and the main guards. If it be indispensable to slaughter these last, it must be done by a thrust of the sword.

Q. Which is the best quarter to surprise a bivouac from?

A. The one opposite to that on which his main guards are situated.

Q. As soon as the attack has succeeded, what is to be done?

A. Make the prisoners disarmed file off rapidly upon their horses which are to be led, and under a strong escort, which, on no pretext whatever, is to wait for the detachment, and thus join our main army.

Q. If the attack fail, and you have to retreat fighting?

A. Make the detachment retreat rapidly without halting. Leave the best mounted troopers as a rear guard; put them upon a wrong road so as to mislead the pursuit. These troopers will keep up a constant fire, to conceal the sound of the steps of the detachment; and, as soon as they shall have conceived that their artifice has succeeded, and that the party which they cover is out of danger, they will rejoin the detachment by a circuitous route.

If the enemy have selected his bivouac judiciously, and it be difficult to penetrate it, the surprise ought to be carried into execution in a particular manner. That which is required is to get the enemy upon ground less favorable to him than that which he occupies. In this case, divide your party into two unequal portions, and place the strongest in ambuscade; let the other skirmish with the main guard, and, if the enemy sally forth, let the concealed body charge home.

A night attack may have a less serious object; that, for instance, of increasing the weariness of the enemy, by preventing him from sleeping. In this case, only a few men are required; you must confine your real surprise to carrying off some vedettes, or small picquets, and opening a pistol fire upon the line.

Q. If it be you that the enemy comes to surprise, what do you do?

A. It is indispensable that an officer of an advance guard, who establishes himself in bivouac, with reason to apprehend that the enemy will come to surprise, should make particular dispositions the moment that he reaches his ground. These dispositions are the following, especially if his troops be few in number, and at a distance from support.

That he should select a bivouac covered, fortified, so to speak, by a ditch, a barrier, barricades, &c. so as to be under cover, from a gallop, or a *coup de main*.

That temporary barricades enclose all the approaches to a bivouac, which are not naturally defended, and that these barricades may not be perceived or removed except by ourselves.* That this bivouac should be concentrated in the smallest possible space.

That orders should be issued that, in the event of the enemy attacking, the men are not to run to their horses, but defend themselves on foot.

That he should assign beforehand to each individual the post that he is to occupy, at the first pistol shot, or those fired by the vedettes.

* The word, "except," or "que," is not in the original; but as it is evidently an oversight, we have taken the liberty to supply it. (Trans.)

That he should allow no fires in the bivouac, or direct them to be lighted in a different position.

That he should keep a portion of the horses bridled, and a greater number of men awake.

That every trooper shall have his bridle over his arm, his car- touche box round his waist, and his carbine at hand.

Q. If the bivouac be in a farm house?

A. Shut yourself up in it, and, at the moment of attack, make some men bridle the horses, whilst the others fire through the windows, up to the moment when, the entrenchment being on the point of being forced, every man may mount, and make together a vigorous sortie *en masse*.

Q. If the bivouac be in an open plain, and protected by nothing?

A. Make your arrangements so as to be on horseback, and compact in a moment.

Q. If the enemy surprise isolated men?

A. Not to be bewildered, not to rush to your horses, but take your assailant man to man, fire at close quarters, thrust at him, hamstring his horse, &c., stoop down, throw yourself behind obstacles, as a ditch, a tree, a post, &c. ; make no prisoners. A man on foot, who keeps his wits about him, is very strong against a mounted one who attacks by night.

Night surprises are, in general, more terrifying than dangerous. The moral effect is nine-tenths the secret of their success. Meet them then with a dead silence. The calmness and silence of the attacked often strike such terror into the assailant that the moral effect is transferred, and the assailant is irresistibly hurried on to retreat.

Q. Are day surprises more dangerous than night ones?

A. Yes, when they succeed ; because the assailant sees where to deliver his cuts, and can ascertain the weakness of the attacked party.

To these surprises one must especially oppose the greatest presence of mind.

On the day of the affair of Maëroslawetz, in the Russian cam-

paign, nearly the whole of the Russian light cavalry was in ambuscade on the flanks of our column. It attempted so well combined an attack upon our general staff that the emperor himself was exposed to great danger. At the same instant, Platow and his cossacks charged us, who composed the rear guard. From fifteen hundred to two thousand cossacks surrounded the two feeble squadrons, which remained to us, and pressed us so closely that our men were wounded in the ranks by lance thrusts. One of these squadrons, commanded by the brave Verdières, (now a general), brought their lances to the rest, facing front and rear, and so intimidated the enemy by its coolness, that he retired without having been able to penetrate us. We maintained our position against an enemy ten times our numbers, and whose bold manœuvre would have had the most fatal results for us, and probably for the army, had it not been for the coolness of our officers and lancers.

Q. How do you decoy the enemy into an ambuscade ? ♦

A. By occupying his attention in such a manner that he does not perceive it. To this end, we should sometimes briskly engage our best troopers, making them subsequently wheel about rapidly to induce the enemy to pursue them. In this case, we can lead him directly on the ambuscade. Sometimes by manœuvring leisurely, changing front, and then forcing the enemy upon the ambuscade.

CHAPTER XXIX.

OF FLAGS OF TRUCE, OR CARTELS.

Officers and non-commissioned officers, sent with cartels, are sometimes cut down by the enemy, and that entirely owing to their own fault. In order to avoid this danger, it is indispensable that a person should be thoroughly acquainted with the duties of this part of the military profession.

The bearer of the flag of truce always approaching the first line, that is to say, the men who are most excited by the action, those whose agitation and flurry have very little to do with coolness of behaviour, and are often opposed to it, he ought in a manner to feel his way before him 'ere he ventures his person ; and he ought the rather to do this, inasmuch as very often the enemy has orders not to receive him, and he may be made a prisoner of war in good earnest.

The bearer of the cartel then ought to be selected from among the officers ; or non-commissioned officers, who are the best skilled, in the warfare of advance posts, and the most particular knowledge of the enemy whom he approaches.

The cartel bearer ought to be well mounted, and preceded by a trumpeter equally as well mounted, so that, if, after they have both advanced, they are attacked, they may be able to extricate themselves out of the affair.

Before despatching a cartel bearer, the commandant of the advance guard will make his skirmishers cease firing, slope carbines, and his troopers halt short.

The cartel bearer will select, for the place of his departure from the line, that which is most in view and opposite to the officer commanding the enemy's skirmishers.

Q. Why so ?

A. Because he will be sooner perceived, and sooner in commu-

nication with that officer, who, understanding his design, will terminate the dangers, which might otherwise threaten him.

The cartel bearer will proceed at a walk beyond the line of our skirmishers.

Q. Wherefore?

A. Because the coolness of this procedure will point him out as a non-combatant.

He will cause himself to be preceded at a distance of twenty-five paces by his trumpeter : he will then halt, and cause his trumpeter to halt, who will immediately sound.

The cartel bearer, having been perceived, will order his trumpeter to return his sword, and will do the same thing himself in a studied manner, so that he may be thoroughly understood. He will then display his handkerchief, waving it in his right hand : his holsters will remain uncovered.

Q. Why should he return his sword?

A. In order more clearly to explain the object of his mission.

He will not allow himself to be approached by the enemy's troopers, until he shall be assured of their pacific intentions, and until he shall perceive that they are acting under the orders of their commanders.

Having obtained this conviction, he will endeavor to put himself as speedily as possible in communication with an officer ; he will then allow his eyes to be bandaged, and conduct himself with coolness and security.

A cartel bearer has almost always a double mission, of which the secret part is much more important than his ostensible object. Often a flimsy pretext covers the reconnaissance which he carries on in the enemy's camp ; it is for this reason that every officer should not be entrusted as a cartel bearer, and that the most intelligent ought to be selected for this service.

Almost always the bandage is removed from the eyes of a cartel bearer, when he has reached the general staff. Sometimes also this imprudence is not committed. In the first case, the cartel bearer ought to see every thing without appearing to take notice

of any thing. In the second, he ought not to lose a syllable of all the conversation passing around him ; consequently, it is indispensable that he should speak the language of the enemy, and that the enemy should not suspect that he knows it.

To see every thing, signifies the taking in, by a rapid glance, the peculiarities of the ground, the number and description of the troops, their local position, their physical and moral condition. For a practised eye, this knowledge ought to be perfect, notwithstanding the guarded precautions of the enemy, and the cloak of indifference under which the general staff conceive it to be their duty to conceal their anxieties or their plans.

To hear every thing, signifies the not losing a syllable of the conversation carried on around him. Often a single word dropped by a young officer or a soldier conveys more information than all the laborcd discourses of a general.

It is necessary that a cartel bearer should not forget that he himself is in the witness box, and that he is the object of as intense curiosity, as he himself feels towards every thing passing around him. Let him, under the appearance of candor conceal every thing that he does not wish the enemy to worn out of him. Many questions, of an apparently insignificant character, will be addressed to him : let him weigh them well before he replies to them.

When a parley is desired, we must select not, only the officer, but the trumpeter, for this last will be invited to drink, and will be closely questioned. Let this soldier then be sober and taciturn, and let a strict order, enforced before his departure on his errand, ensure these qualifications.

A cartel bearer entering into a camp is always the object of a great and general curiosity. He is scanned from head to foot ; he is looked upon, in despite of himself, as a sample of the troops to which he belongs. It is indispensable that this sample should be well selected under every point of view, so that the moral impression which he may convey, shall be complete and impressive. Let the cartel bearer then be soldierlike in his bearing, well dressed, well armed ; let him have all the appearances of strength, and ad-

dress, and let him be mounted on a powerful horse in good condition. Let the trumpeter, who accompanies him resemble him.

Under no pretext ought an officer of skirmishers to let his men cease firing, or to enter into a parley himself without the orders of his superior officer. In the campaign of 1809, we were sent into Hungary to unite the army of Italy to the grand army. Having arrived before Edimbourg, the Hungarian cavalry halted, and requested a capitulation for the town. Our advance guard was very far in advance of our main body; it listened to the proposals which were made to it, without being able to reply immediately to them, because our generals were at a distance. These proposals required the presence of a French officer in the Austrian camp. The officer commanding our extreme advance guard, considering nothing but the great advantage which would arise from the prompt evacuation of this important town, but fearing that any officer whom he might send, to discuss the terms of this evacuation, would not do it as well as he could himself, decided to go in person to the enemy's camp. He set out accordingly, and when our generals reached our advance guard, he was not to be found. His absence, although caused by a desire to render himself useful, but which left the advance guard without its commandant, was severely reprehended. Let not this example be lost upon any commandant of an advance guard, who may find himself similarly situated, and who thus, with a skilful enemy, although wishing to act for the best, might suffer himself to be drawn into a snare, and compromise the safety of the army.

Q. If a cartel bearer from the enemy presents himself at our advance posts, what should we do.

A. The officer of the advance guard will not check the fire of his skirmishers, because those of the enemy have ceased firing, but will march gently forward, and send immediately to inform the officer commanding the advance guard, and receive his instructions. Meanwhile, he will direct the skirmishers, especially those on the wings, to look out well, and see whether the enemy is not making a flank movement, and whether the despatch of the cartel bearer be not a *ruse de guerre* either to attack us, or gain precious time.

If the general of the advance guard orders him to continue his fire, the commandant of the skirmishers will make a signal to the cartel bearer that he had better retire forthwith, and that he will not be admitted.

Q. If orders are given to receive the cartel bearer ?

A. The officer of the advance guard will halt his men, and cease firing ; then returning his sword, and accompanied by two non-commissioned officers and two troopers, he will proceed in advance to the cartel bearer, whom he will halt as much as possible in a hollow, to prevent his seeing our lines. He will then inform him that he will be received, and make him, as well as his trumpeter to turn so as to face the enemy, and have their eyes carefully bandaged, so that they shall absolutely be unable to see any thing.

This done, he will have the truce bearer conducted to the general staff by a trooper, who will lead his horse by the bridle, and be accompanied by one of his non-commissioned officers. The trumpeter will be guarded by the other non-commissioned officer and trooper.

The officer himself will remain alongside of the trumpeter, and by kind treatment, and a series of skilful questions, endeavor to extract information from him regarding the enemy.

The non-commissioned officer, accompanying the cartel bearer, will march abreast of him, and carefully observe that he does not lift the bandage in order to look around him. He will not reply to any of the questions, which he may put to him, and will not allow any conversation to be held with him. Arrived at the general staff, he will deliver him over to the commandant, from whom he will carry back orders to the officer commanding the advance guard.

It is prudent not to unbandage the eyes of a cartel bearer ; but nevertheless cases may occur in which it would be politic to act otherwise. The seasonableness of this measure can only be judged of by the commander-in-chief. If the cartel bearer be conducted into a place, whence he can see nothing of our troops, there is no imprudence in freeing his eyes, and the commandant, whilst putting

questions to him, will be better able to judge of the impressions which he receives, and will gather most important information therefrom.

If the appearance of our troops be likely to intimidate the enemy, we ought to point them out to the truce bearer, especially, if we purpose resuming offensive operations, immediately after sending him back. "Unbandage the eyes of this officer," said General • Maisons, (when cut off before Courtray in 1814 by 25,000 men of the holy alliance), pointing to a cartel bearer of the Duke of Saxe Weimar, "your duke, sir, is mistaken as to our number, for, as you see, we are but 6,000 strong. It appears too that he is ignorant of my title of general of division, and commander-in-chief, since he has allowed himself to superscribe this letter, 'To Mr. Maisons.' Report to him thus of me, sir, that he should have recollect that I was a general officer, when his name was unknown to any one but his cook, and add that I only allow him ten minutes to leave the passage free to me." In twenty minutes afterwards, we had dashed through, and overthrown the army of the duke, and we carried off with us to Lisle his guns, his colors, and part of his infantry.

CHAPTER XXX.

OF ESCORTS AND CONVOYS.

Q. Are there several descriptions of convoys, and what are they ?

A. There are three, a guard of honor, an escort of general officers in the field, and an escort of convoys. .

Q. In the first case, what is the duty of the escort ?

A. To precede and follow the prince or his representative.

Q. In the second case ?

A. To proceed to the head quarters of the general : to obey scrupulously the orders which may be given to it by this general, or his principal staff officer, and to remain there until the general sends it back, or another guard comes to relieve it.

Q. What is the duty of the officer commanding this escort ?

A. To command and handle his detachment in the most correct manner possible, so as to create a favorable impression of himself and his regiment.

To not fail in having rations served out to his men.

To survey the quarters, so that the men and horses may be bestowed in the best possible manner.

To maintain a strict discipline. To require that their conduct be regulated by the most rigid propriety and uniformity.

To watch that the men are always present, so as to be at hand when they are wanted.

To superintend the care bestowed upon the horses after they return from a tour of duty.

To establish the utmost possible regularity in the different du-

ties carried on, however irregular may be the circumstances in which he is placed.

To neglect no opportunity of acquainting his colonel with the situation and the circumstances of the detachment..

If he perceives that the officers of the general staff demand a duty to be performed by his men which militates against the special one for which they have been selected, to address himself immediately and directly to the general, in order to put a stop to the abuse which may fatigue beyond measure, and lower the estimation of, his troopers.

In case an officer of the general staff should desire to ride one of the horses of his detachment, he should formally refuse to allow it, unless he receives an order to that effect from the general.

In the ancient army, we were excessively lavish of our light cavalry. Thus, I have seen nearly whole regiments cut up by being converted into servants of general officers, or members of Government, &c. ; by being employed as escorts to private baggage waggons, caléches, canteens, &c. A certain general of a cavalry division, and justly celebrated, ordered for himself, despite of the orders of the emperor, a picked escort, the men of which not only formed his guard of honor, but were further the servants of all the officers and employés of the general staff. These escorts so reduced the strength of a regiment that in the day of battle, there was not a man in the ranks.

The handsomer the uniform of a regiment happened to be, the more certain were they of being selected for this abuse of the service, because monsieur lieutenant the aid-de-camp, and monsieur the chief physician found that it looked infinitely better to have at their heels an hussar with a brilliant pelisse than a chasseur with a more sombre uniform.

The abuse of these escorts did not stop there. The officers of the general staff, shamefully forgetting that they were paid for servants and horses of their own, and abusing the easiness, or the distraction, of their generals, put troopers in charge of their led horses, and rode themselves the horses of other troopers. The unfortunate chasseurs and hussars, dismounted, followed on foot,

and very soon lost all traces of their horses, which, overridden, and abandoned, were speedily lost to the state and the regiment.

I know of no abuse more revolting to propriety, and which the officers of an escort ought more firmly to set their faces against, than this. If, in despite of their exertions, such a one occurs, it is their duty to expostulate with general officers of all ranks without delay, and to give immediate information to their colonel.

If, in the case of the separation of a part of the escort, they (the officers), fall in with a horse belonging to the detached party mounted by a stranger, they ought immediately to dismount him, whosoever he may be, and resume possession of the horse, if this person do not forthwith justify his having it by the production of a written order from the general.

Every trooper, who, without the orders of his immediate commanding officer, allows his horse to be mounted by another person, whatever may be his rank, ought at the same instant to be dismounted,* and sent as a defaulter to the rear.

Which of us, amongst those who returned from Moscow, does not remember, notwithstanding their exhaustion, and so many other causes of unhappiness, having blushed with shame and anger at seeing, in that disastrous retreat, a general officer of artillery, whose name I conceal, since he is no longer in the land of the living, take the horses from his guns, which he abandoned, to put them to his white and gilded caléche, filled with the spoil of Moscow? As long as I live, the remembrance of it will remain engraven on my brain! To my idea, he is the type of the most degraded demoralization! Shame rest upon him to whom I am indebted for this type! Shame be upon every officer, who, for his own private advantage, dismounts an unfortunate trooper, whose horse was his fortune, his glory, his future! Shame be unto him who thus deprives the field of battle of a brave soldier, who would have contributed to the honor of his regiment, and the glory of our flag!

* *Aliquando bonus dormitat Homerus.* The man having lent his horse to another, would by that circumstance, be already dismounted. Probably, the author's meaning is, that this should be done, if it were discovered that he had so lent his horse on a previous occasion. (Trans.)

Q. If the enemy attack the general staff, what is the duty of the escort?

A. To surround the general, to defend him valiantly, and perish to a man rather than allow him to be taken prisoner, or cut down.

Q. Are there many descriptions of convoys?

A. Four kinds; convoys of ammunition, provisions, prisoners, and wounded.

Q. What is the first precaution which an officer commanding a convoy ought to take?

A. To form the carriages into divisions of equal strength, and to entrust the command of them to the most intelligent and active officers, and non-commissioned officers. He ought then to ascertain that the convoy, proceeding either right or left in front, obeys correctly and rapidly the orders which he issues.

Q. What are the general rules relative to the command of convoys?

A. The commandant of the escort of a convoy ought never to lose sight of the circumstance that the sole object of his mission is to bring safely to its destination the convoy which has been entrusted to his charge. Thus, every time that the enemy shows himself, if he can avoid coming to action, he will do so; and, if he does attack him, it will only be when he conceives that this attack, by retarding, or harassing the enemy, will give time for the convoy either to reach a position where it will be less exposed, or to escape the danger, or else to assume an order of formation more favorable for its defence.

Q. The enemy being repulsed, what is the commandant's duty?

A. To be particularly careful not to pursue him, whatever particular advantages he may hope to reap from this pursuit; but to make his convoy file off, whose safety, I repeat, is the sole object of his solicitude.

Q. How ought a convoy to march?

A. In the closest order possible. Thus the carriages will leave no intervals between them, and, whenever the breadth of the

road will allow of it, they should proceed two abreast. Arrived at a defile, they will form column of sub-divisions with regularity, in order, when they have cleared it, to resume the least deep order possible.

Q. If some carriages move more slowly than the rest, and retard the general march, what ought to be done ?

A. To ascertain the causes of this slow progress. To form an opinion whether the peasants driving these carriages are not working with a bad grace in the performance of their duties ; whether they do not anticipate an attack, and are not doing all in their power to help it forward. In this case, change the carters, and commit those, whom there is reason to distrust, to safe custody. If the sluggishness of these carriages is to be attributed to their being overloaded with reference to the strength of the cattle, distribute the loads more equitably throughout the convoy. If these carts are ricketty, do not hesitate to abandon them, after having secured the load, the horses and such portions of them as may be of use to the rest of the convoy.

Q. How does the escort of a convoy march ?

A. As the cavalry, which escorts a convoy ought, above every thing, rather to ascertain that its way is clear than to protect it offensively, it pushes its advance guard as much as possible to the front, it also makes its look outs on the flanks keep at a good distance, in order to command a more extensive view, and in order that, in case of the convoy being threatened, they may give it intimation in sufficient time to enable it to take the necessary precautions. The rear guard will also march at a considerable distance. This arrangement of the cavalry does not prevent it from communicating with the convoy by intermediate troopers, who will indicate the pace at which it is proceeding, and the halts which it makes.

Q. When a convoy halts, what order ought it to form in ?

A. After having selected for the halting ground an eligible spot on the side of the road, the commandant will form up the convoy on it in close column of divisions.

Q. What do you understand by a well selected spot for the halt of a convoy?

A. A firm ground, on which you can form, and which you can quit with ease; in the vicinity of a brook, and which offers shade in summer, and a shelter from the northerly blasts in winter.

If the enemy is moving about in the neighborhood, it is necessary, as far as practicable, that the halt be made to the rear of a defile, which can readily be defended by a few men, and that its situation be masqued so that it will not be easy from a distance to ascertain the importance of the convoy, and its means of defence.

Q. What arrangements do you make for the defence of a convoy?

A. Those pointed out by the importance of the attack and the conformation of the ground; those which facilitate the defence by uniting the objects which present the greatest number of obstacles to the enemy's capturing the carriages, and carrying off to his camp those which he may have taken.

Q. If the attack be foreseen, what should be done?

A. Form up the whole escort upon the side of the attack; take up dispositions to hold the enemy in check, and make the convoy file off as rapidly as possible, which ought not to be halted and parked except at the last extremity. In this manner, let the whole gain a defile, and, upon a confined ground, where the front of the attack cannot be more extended than that of the defence, keep the enemy vigorously at bay with the rear guard.

Q. If the attack be unforeseen, what is to be done?

A. Do not hesitate to charge the assailant vigorously, without breaking your ranks, giving way to heedless impetuosity, or pursuing him farther than is necessary to become well acquainted with the enemy's strength, always remaining within a convenient distance of the convoy.

Q. If the attack be made upon the head of the column, and we are compelled to retreat, what precautions ought we to observe?

A. To preserve a coolness in the column, and make the carriages reverse without disorder; a carriage, whose horses have been desrceted, or are badly driven, may interfere with the retreat, and cause the loss of the whole convoy.

Q. *If the enemy pursues in strength and with ardor, what means can we yet adopt to check him?*

A. Abandon some carriages in order to save the others, choke up a defile with one of them, of which you have taken off the wheels, make use of it as a rampart from behind which you will pour in a murderous fire upon the enemy.

Q. *If the commandant becomes thoroughly convinced that he cannot save the convoy?*

A. He ought to endeavor to destroy it by setting fire to it, or whatever other means may be in his power, after having saved the horses belonging to it.

Q. *If the enemy suddenly, and in very superior strength, attacks the convoy in flank, coming sharply down upon it, what steps ought we to take?*

A. Draw the escort all up together, and only defend that part of the convoy which we have hopes of saving.

Q. *If we are obliged to halt the convoy in order to defend it?*

A. It is necessary, if it be impossible to gain the side of the road, to double the file of the carriages, by making them successively turn opposite to each other, and to different hands, so that the horses of two teams, one following the other, face each other, leaving hardly any interval between the heads of the leaders, the rear of the carriages being turned outwards to the external flank. As the carriages advance, and succeed each other, all the carriages of the same division will range up in the same way. If the road is bounded by deep ditches on either hand, this manœuvre will sometimes render it utterly impossible for the enemy's cavalry to penetrate within the convoy. If we can throw ourselves off to the side of the road, we should form the most compact square possible, the horses inside, and, enclosing ourselves in this fortification, we should defend ourselves by a heavy and well directed fire.

Q. Ought not our precautions to be redoubled in a mountainous country?

A. Yes. Because the difficulties of the ground retard the march of the convoy, and offer more favorable chances for those who would wish to attack it. It is prudent for a commandant of a convoy, who knows the ground which he has to pass over, and who is aware that a certain desile upon his road may be occupied by a detachment of the enemy, to give orders to his advance guard to proceed ahead and make themselves masters of this desile. •

Q. What particular precautions would you take for a convoy of ammunition?

A. To guard against fire being in its vicinity. Thus, whilst marching, the men composing the convoy ought to be strictly prohibited from smoking. If they meet people smoking on the road, the advance guard ought to make them extinguish their pipe. If we pass a smithy, we ought to make the owner close all the doors and windows which face the road by which the convoy passes, &c. &c.

If we are tending towards a town that has been burned down, and wherein fire may be still smouldering under the ashes, the convoy must diverge from the road.

If the convoy is obliged to pass by bivouacs, the guard must post itself in front of the fires ; it must forbid their being stirred ; the carriages must pass one by one, at considerable intervals from each other, and as quickly as possible. •

Q. When the convoy halts to rest, what precautions should be taken?

A. To have as few fires as possible. To put these fires at a distance from and to leeward of the park, and to kindle them in such situations that, in the event of a shift of wind, the sparks cannot possibly be carried over to the ammunition waggons.

A good precaution, in the event of a streamlet being at hand, would be to have buckets filled with water close to the fires, so that should these fires, by a shift of wind, endanger the park, they could be instantly extinguished.

Q. If the convoy were attacked by superior forces, and it were impossible to save it, what is to be done?

A. Save the horses, and destroy the waggons and the ammunition.

Q. How must you set about that?

A. Bring the carriages together, heap them close to each other, take out and send the horses to the rear; half open the ammunition boxes, and form trains of powder laid upon bars of wood from one to the other; pour a large quantity of powder below and around the waggons; make to the rear, and on the side to which you intend to retreat, a train of a thickness calculated for the rapidity of the communication of the fire; then withdraw the escort, and leave behind a man well mounted, who with a small piece of match fastened to the end of a stick or his sword, may ignite it, and gallop off as fast as possible.

Q. If the attack leave us the hope of being able to save the empty waggons, what should we do?

A. You would open the ammunition boxes, and throw the powder into a marsh, into a ditch, or into any wet place: if none of these are at hand, you would scatter it to the winds, and you would then make the waggons file off, whose rapid retreat you would direct and cover.

Q. What precautions would you take in escorting wounded men?

A. If you be not threatened by the enemy, you would consult the medical officers who accompany you, in order to judge what halts are necessary to allow the wounded men to recover strength and courage. You would chuse the most level and the least rugged ground for the carriages to go over; you would halt near streams to enable you to draw water thence to quench the wounded men's thirst, and you would direct a portion of your troopers to attend to their brethren, making no distinction between your own wounded and those of the enemy.

Q. What precautions would you take for the escort of prisoners?

A. The escort of prisoners demands special attention, which is too much neglected through the heedless confidence of our nation.

Q. What does it consist in?

A. The officer, or non-commissioned officer, entrusted with conducting prisoners, ought to keep them together, place them in double file, and then put them in march in column, having this column carefully preceded, followed, and flanked. Then forbid any conversation between the prisoners and the escort.

If you are in an enemy's country, allow no communication between the inhabitants and the prisoners.

Carefully sound the disposition of the prisoners, which is done by keeping your eye constantly upon them.

If you perceive that they are hatching any plot together, warn them by one of your men, who speaks their language perfectly, that, if they resist, you will fire upon them.

Watch that the escort has invariably its arms loaded and ready, and that none of the men stray and get drunk.

If you halt, and bivouac for the night, assemble the prisoners, and post a chain of sentries round them.

If this halt takes place in a village, put the prisoners in the church and post sentries inside and out.

Watch that the prisoners are treated with the greatest gentleness; that they want for nothing which can be procured for them: that they are allowed to retain possession of their clothes and cloaks, and that no insult is offered to them; but, if they attempt to escape, n... an example of them.

Q. Which is the best method of attacking a convoy?

A. By surprise and in a ~~quarrel~~.

Q. How would you form up your men, in order to attack a convoy?

A. In two divisions, calculated according to the disposition of the escort, and the configuration of the ground. The first will attack the head of the convoy; the second, its flank. The attack ought to be lively and bold and always tend to cut off the convoy from its escort.

Q. If you attack in a plain, and the enemy have had time to park, and enclose himself within the square of his waggons, how do you act?

A. If the body, thus defending the convoy, be weaker than the

assailing party, the latter dismounts a great portion of his men, and carries the square. If he cannot succeed, he makes a feint of retiring in an opposite direction to that in which he knows the convoy will proceed by ; then, by making a detour, he places himself in ambuscade, and, when the convoy has resumed its march, he renews the attack.

CHAPTER XXXI.

OF SUPPORTING ARTILLERY.

Q. Does not the cavalry, which supports artillery, post itself in its rear?

A. This is a fault, which I have seen but too often committed, and the cause of which I cannot explain except by attributing it to the old notions of routine, or to the ill judged vanity of certain officers, who conceive that their honor is concerned in seeking useless danger ; or else, to the ignorance of certain others, who, having but accidentally once in their lives been employed in this service, have no conception of the duties devolved upon them.

Q. Ought not the cavalry of support to be posted very close to the guns?

A. This is another error.

Q. Ought it not to post itself within sight of the enemy to demonstrate to him that the pieces are protected?

A. This is a third error, just as bad as the two preceding ones.

Q. Where then ought it to post itself?

A. Your sole thought should be directed how to answer this question : what is the duty of a supporting body ? Is it, to allow itself to be uselessly slaughtered without ever having crossed swords, so as to be good for nothing, when the seasonable time for employing it arrives ? Is it, to embarrass the manœuvring of the guns ? Is it, to invite the enemy to charge these very guns ? Yet this is what will infallibly happen, if you post yourself as you have just pointed out to me. In fact, the supporting body of a battery, if placed in its rear, is very speedily destroyed by the round shot of the enemy directed against this battery. This same body, posted too near, intercepts the communication of the guns with their waggons ; and, posted in sight of the enemy, that is to say, count-

ed, and estimated at its just value by him, especially, if the guns are brought forward into a ticklish position, it is speedily attacked, and overwhelmed by superior forces. Our body of support ought therefore to place itself on one flank of the guns, in order to be out of the way of the round shot which the enemy directs against them ; at a hundred paces from them, so as to have its whole impulsive force if it charges an attacking body, and masqued so that it may not serve as a target, and that it may leave the enemy in doubt both as to its position and its strength.

Q. But how can it judge what are the dispositions of the enemy, if it takes up its position behind any thing which conceals it from view ?

A. Its officer alone personally takes up a position whence he can see every thing, but being at the same time completely in view of his men. He even takes the precaution of posting himself out of the direction of this body, in order not to afford the enemy an opportunity of judging its whereabouts by his own.

Q. If the enemy charges our guns, what does the body of support do ?

A. It allows the charge, which is naturally disunited and blown by the time it arrives, to come up ; then attacking him, at advantage and with the utmost vigor, either in front or in flank, it directs all its efforts to repulse him. If it succeed, it will not follow up its success too far, but pulls up sharp, and clears the front of our battery which it has rescued, and which pours in canister upon the retreating enemy.

Q. If our guns, judging their position too far advanced, and the threatening attitude of the enemy too formidable, commence retiring, what does our body of support do ?

A. If they are not going to retire to any considerable distance, it maintains the same relative position to the battery that it had previously.

Q. If the retreat be rapid, and the guns have to proceed a long way before they again take up position ?

A. The supporting body marches abreast of the guns, and forms their rear guard, if they form column.

Q. If the pieces, having reached a causeway, retreat thence?

A. The body of support uncovers the rear guns, and places itself so as to be clear of the route, to oppose attacks on the flanks, and to be equally ready in case the enemy should attack the head of the column.

Q. If the guns are attacked by an overwhelming force, is the supporting body allowed to retreat?

A. No; not so long as the gunners stand to their guns.

Q. And if the gunners are killed, or taken prisoners, and the guns are captured by the enemy?

A. The body of support ought to charge its rear guard, harass it, penetrate the retreating body, and, in fine, exert itself to the utmost to retake the battery, or to force it on to such ground that the enemy himself cannot bring it into play.

Q. If we succeed in retaking it?

A. You will bring the guns back.

Q. If you are unable to do so?

A. You save the teams.

Q. If the gunners, conceiving it impossible to preserve their guns, decide upon spiking them, or simply unharnessing the horses and retiring?

A. The duty of the support is then to protect the retreat of the gunners and of the teams.

Q. If, when our battery is retreating, some guns either stick in the mud, or are upset, so that the gunners unassisted cannot extricate them, or right them?

A. The most active men of the troop ought immediately to spring to the ground, give their horses to be held, and assist the gunners.

Q. If the enemy takes advantage of this moment to attack us?

A. The troopers remount, and show front to the enemy.

Q. If a battery in position has lost so many men as to be incapable of continuing the fire, and makes a requisition on the troop of support for a few hands.

A. It will lend them, and send immediate intimation of having done so to its immediate commanding officer.

Q. *It occasionally happens that a ruse de guerre is employed, especially against masses of cavalry, which form up together for the purpose of charging, and that is, bringing up guns against them, whose offensive movement is masqued by a squadron of cavalry. What ought the commandant of this squadron to do in such a case?*

A. Always place, whilst marching, his squadron before the guns, so that the eye of the enemy cannot penetrate the screen which he forms ; then, after the guns are formed up, londed, port-fires lighted, and all ready to open, he rapidly unmasks them by wheeling by sections to the right and left at the gallop, and takes up his position of support.

It is requisite that the support should so act as to inspire the gunners with the utmost confidence in it, for they will fire with a deliberation, certainty, and sustained action, in proportion as that confidence shall be most complete.

Let this body keep its eyes more open when supporting guns of the new, than of the old, pattern.

Q. Why so ?

A. Because the old pattern, retiring with the prolonge, will not think of retreating until the last moment, and will thus fire canister longer without moving ; whilst the new construction requiring the guns to limber up, before retiring, prudence demands that the gunners should not wait till the enemy's cavalry be amongst them before they execute this movement.*

In the same way, the guns, whilst retreating, should pay more attention to those of the new, than the old, construction.

Q. Wherefore ?

A. Because, if a pole horse be killed, or the traces cut, in teams of the ancient mode of putting to, the piece, dragged by the single bar, can continue its retreat ; whilst, with teams according to the new method, the six horses drawing by the same four traces,

* This remark is not applicable to British field pieces, all of which can retire with the prolonge, keeping up their fire during the retrograde movement. (Trans.)

if one of these traces be cut or broken, the piece is unteamed. If a misfortune of this kind occur, let the support hasten to assist the gunners to repair it, and let it place immediately at their disposal their horses and forage ropes.*

* Swingle bars are not used in the British artillery. The traces of each horse are attached to the collar of the one in its rear, much in the manner indicated in the text. (Trans.)

CHAPTER XXXII.

OF GUNS.

THE SERVING OF THOSE WHICH HAVE BEEN CAPTURED,
OR LOST THEIR GUNNERS.

It would be useful to instruct a light cavalry man in the theory of serving guns; for an occasion may arise for his putting this instruction to use, either upon the field of battle, or in a place wherein he may find himself shut up.

Even if it were of no further use to him than to initiate him into the drawing up of a battery, and the slightness of its intrinsic means of defence when attacked by cavalry, the situation and relative importance of those who serve the gun, it would not be thrown away upon these troopers, whose duty it is to carry it.

It is this opinion which has induced me in this place to give not a summary, which could only be tolerably correct, of an art which demands above every thing the most scrupulous exactness, but the theory itself which lays down nothing useless and inexplicable. If a case arises in which you require to have recourse to this theory, you will employ it; if a summary will answer the purpose, each reader will make it for himself, and in so much the more rational a manner, as he will have learnt to appreciate the usefulness of each individual portion in its details.

A field piece consists of two distinct portions; the gun with its carriage, and the limber, on which is placed the ammunition box.

When a piece is in battery, the limber, to which the horses are attached, is taken to a distance from it, to prevent the round shot, directed by the enemy against the guns, causing a double loss,

by the blowing up of the ammunition* contained in the limber boxes.

The serving of guns embraces four very distinct actions:

- Spunging and loading.
- Supplying ammunition.
- Pointing and priming.
- Firing.

Six men are necessary to work a gun.

Two, dividing the details of loading between them, are called *first servers* and are posted on the right and left of the piece facing the enemy.†

The third, pointing the piece and priming, is called *the pointer*, and is posted on the left.

The fourth, guiding the trail, and assisting the preceding one in the operation of pointing, is posted to the right.

The fifth, entrusted with the linstock is named *second server*, and is posted on the right.

Lastly, the sixth, entrusted with the supply of ammunition, is termed *second server on the left*.

These six men are posted, three on each side, at eighteen inches distant from, and fronting, the gun.

FIRST SERVER ON THE RIGHT.

Q. How is the piece mounted in order to be worked and manœuvred?

A. Upon a carriage.

* The French system of keeping the ammunition in haversacs in rear of each piece is vicious for several reasons. That of the British service is preferable, in which the limbers are drawn up in rear of their respective pieces, facing the same way and with an interval of ten yards between the leaders' heads and the trail of the gun. Were they removed to a greater distance, the rapid firing of the guns would be interfered with, as only one round at a time is brought up from the limber. (Trans.)

† It may be necessary to state that the French detail of duties is different from our own; so much so in fact that we at one time thought of adding notes wherever a difference occurs, but, as this would render the notes too copious, we shall confine ourselves to the essential ones. A remarkable one takes place here, in which the positions of priming and firing relatively to the gun are reversed. (Trans.)

Q. What is implied by the term "gun?"

A. The gun, properly so called, taken together with its carriage.

Q. The piece being in position for working, which is its right and which is its left?

A. The right and left of the men facing the enemy.

Q. What is the bore?

A. The interior hollow destined to receive the charge. In guns, the bore is of the same diameter throughout its length.

Q. What is the muzzle?

A. The entrance of the bore.

Q. What is the vent?

A. The hole pierced towards the bottom of the bore, and by means of which the charge is ignited.

Q. What is the swell of the muzzle?

A. The enlargement of the metal to be seen towards the mouth of the piece.

Q. And the astragal?

A. The moulding encircling the gun below the swell.

Q. What is the sponge?

A. The instrument used for loading. It is composed of a staff, sponge, and rammer head. The sponge is used to clean the piece; the rammer head to set the charge home. They are both secured by a ferrule.

TAKE POST FOR EXERCISE.

Take post on the right of the gun, eighteen inches from, and outside the wheel, the left side ten inches in advance of the wheel. Hold the sponge horizontally, the sponge head to the left, the right hand about the middle of the staff, the left hand eighteen inches from the right, the nails of both hands downwards, the arms hanging at their natural length.

PREPARE FOR ACTION.

Carry the left foot two feet from the right, the line of the heels parallel to the direction of the wheel, bend the left knee and

straighten the right, the feet equally turned out, the body perpendicular over the hips.

LOAD—(FIVE MOTIONS.)

1st. Raise yourself upon the right leg, and bring up the left foot—stretch out the right arm in line with the shoulders. Let the staff slip through the left hand as far as the ferrule of the sponge head ; bend the left arm, elbow close to the body, to bring the sponge up to the shoulder.

2d. Take a long step to the front, commencing with the left foot, and bringing up the right foot.

3d. Carry the right foot two feet from the left, straightening the left knee, and bending the right, the heels placed upon a line parallel to the direction of the piece ; bring the sponge head to the face of the muzzle without entering it, the staff in a line with the prolongation of the bore.

4th. Enter the sponge, and pass it down the bore, as far as the right hand ; straightening the right knee and bending the left ; at the same time put the left hand flat upon the thigh, keeping the feet fast, the body upright, and the shoulders square.

5th. Slide the right hand along the staff, straightening the left knee, and bending the right ; seize the staff six inches from the ferrule of the rammer head ; send the sponge home to the bottom of the bore, straightening the right knee and bending the left ; grasp the staff with the left hand, the nails downwards, from the side of the muzzle, and six inches from the vent.*

SPUNGE—(6 MOTIONS.)

1st. Turn the sponge three times from right to left, and from above downwards, then turn it in the opposite direction, the eyes always directed to the vent, and bring the left hand back again to the thigh.

2d. Draw the sponge half out, straightening the left knee, and bending the right, the right arm at full length, slide the right

* All these movements are unnecessarily complicated; but there appears to be a mistake or omission in the text; as the left hand should quit the sponge staff as it goes home, and then be extended towards the vent as laid down by the author. The text, as it stands, involves an absurdity, inasmuch as the left hand could not be on the sponge staff in that position, and at the same time close to the vent. (Trans.)

hand along the staff, straightening the right knee and bending the left, grasp the staff by the middle.

3d. Spring the sponge altogether, straightening the left knee and bending the right, the right arm extended, the staff in the direction of the prolongation of the bore.

4th. Turn the sponge in the right hand, the arm extended, sponge head downwards, without drawing it into, or keeping it at a distance from, the body, the left hand at first supporting, and without striking upon the staff close to the sponge head to check the movement; the right hand alone afterwards guides the sponge, and never altogether quits it; shift them successively round the staff, nails uppermost, at the same time that the sponge staff falls again into the prolongation of the bore; then receive it into the left hand, nails uppermost, close to the rammer head; bring it to the face of the muzzle without entering it, the eyes fixed upon the vent field.

5th. When the charge* has been introduced, enter the rammer head.

6th. Slide the right hand along the staff, straightening the left knee, and bending the right; seize the staff six inches from the sponge head, ram home the charge strongly to the bottom of the bore, straightening the right knee and bending the left.

RAM HOME—(6 MOTIONS.)

1st. Half spring the rammer, straightening the left knee, and bending the right, the right arm extended, ram home once, straightening the right knee and bending the left.

2d. Half spring the rammer.

3d. Spring rammer.

4th. Rise upon the left leg and bring up the right foot, turning the sponge with the right hand, rammer head downwards, without bringing it in to, or keeping it away from, the body, keeping the staff perpendicularly to his front.

5th. Take a long step backwards with the right foot, bringing it into the place which it had left, bring up the left foot, turning

* The French have their cartridge and round shot united. There is more expedition in loading, but the practice endangers the blowing up of the limbers in moving, and should be eschewed. (Trans.)

the sponge staff at the same time, let the staff fall into the left hand, nails uppermost, the left arm falling naturally, shift the right hand sharply, to bring the nails uppermost.

6th. Resume position for action.

TAKE POST.

Rise upon the right leg, bring up the left foot, and stand fast.

STAND AT EASE.

Put down the sponge staff, the rammer head on the ground, the staff resting on the centre of the wheel, the sponge head pointing upwards.

FIRST SERVER ON THE LEFT.

Q. What is a round shot charge, or cartridge, composed of?

A. It is composed of three parts; a serge bag containing the powder, the round shot, and a wooden bottom placed between the powder and the shot to fasten them together.

TAKE POST.

Post yourself on the left of the piecee, in the position of a soldier without arms, at eighteen inches outside the wheel, the right side ten inches in advance of the wheel.

FOR ACTION.

Carry the right foot two feet from the left, the line of the heels parallel to the direction of the wheel; bend the right knee, and straighten the left, feet equally turned outwards, body upright upon the hips, arms hanging naturally.

LOAD—(5 MOTIONS.)

1st. Rise upon the left leg, and bring up the right foot.

2nd. Take a long step to the front, commencing with the right foot, at an equal distance from the wheel and from the piece, bring up the left foot, and face inwards.

3rd. Carry the left foot two feet from the right, and, straightening the right knee and bending the left, the heels in a line parallel to the direction of the piece, seize the staff with the left hand,*

* In the British service, this gunner, answering to No. 3. of the British service, does not assist No. 2 in spunging and ramming shome, except with heavy ordnance, in which the length of the sponge staff renders such assistance necessary. (Trans.)

nails uppermost, close to the hand of the first server on the right, and nearest to the rammer head; at the same time place the right hand on the flat of the thigh, the feet equally turned outwards, the body upright on the haunches, the shoulders square, and thrown back.

4th. Assist the first server on the right to enter the spunge, straightening the left knee, and bending the right.

5th. Slide the left hand along the staff, straightening the right knee and bending the left, seize the staff close to the rammer head; assist the first server on the right to send home the spunge, straightening the left knee and bending the right; seize the staff with the right hand, the nails downwards, between the two hands of the first server on the right.

SPUNGE -- (6 MOTIONS.)

1st. Assist the first server on the right to turn the spunge at the bottom of the bore: bring the right hand again on the flat of the thigh.

2d. Assist the first server on the right to half spring the spunge, straightening the right knee, and bending the left; the left arm extended; slide the left hand along the staff, following the movement of the hand of the first server on the right, and straightening the left knee and bending the right; seize the staff with the left hand, nails uppermost, close to the hand of the first server on the right, and near the rammer head.

3d. Assist the first server on the right to spring the spunge entirely, straightening the right knee, and bending the left, the left arm extended.

4th. Quit the spunge staff, take the charge by the right, without moving the feet, straightening the left knee and bending the right, receive from the hands of the man, who brings them up, the shot in the left hand, and the cartridge in the right, nails uppermost; front the gun without moving the feet or the knees; introduce the charge into the bore; seize the spunge staff with the left hand, nails uppermost, close to the hand of the first server on the right, towards the spunge head, straightening the right knee and bending the left; bring the right hand upon the thigh again.

* The hands being, of course, close together. (Trans.)

5th. Assist the first server on the right to set home the charge, straightening the left knee and bending the right.

6th. Slide the hand along the staff, straightening the right knee and bending the left; seize the staff close to the sponge head; assist the first server on the right to drive home the charge, straightening the left knee and bending the right.

RAM HOME—(6 MOTIONS.)

1st. Assist the first server on the right to half spring the sponge, straightening the right knee, and bending the left; assist him to ram home, straightening the left knee and bending the right.

2d. Assist the first server on the right to half spring the sponge.

3d. Assist the first server on the right to spring the sponge altogether.

4th. Quit the sponge staff, rise upon the left leg and bring up the right foot.

5th. Take a long step to the rear with the left foot, so as to plant it in its original position, and bring up the right.

6th. Resume position for action.

TAKE POST.

Rise upon the left leg, bring up the right foot, and stand fast.

SECOND SERVER ON THE LEFT.

Q. What do you call the cheeks of a gun carriage?

A. They are the principal portions of the wooden part of the carriage.

*Q. And the cintre de mire?**

A. The elbow in the upper part and towards the centre of the cheeks.

Q. Of what use is the haversack?

A. To carry ammunition in. Each man, who serves a gun with ammunition, ought to have one.

Q. What does the second server on the left carry?

* We have no particular term for this curve, and therefore the French term is naturally adopted (Trans.)

A. A haversack, which he wears on the left side, the tape passing over his right shoulder.

TAKE POST.

Take up the posture of a soldier without arms, upon the left side of the gun, eighteen inches outside of it, and abreast of the *centre de mire*.

FOR ACTION.

Face to the right upon the left heel, and run to the supply of ammunition, in the rear of the gun, in order to fill your haversack.

LOAD.

Return sharply to the gun, front it abreast of the nave, and at eighteen inches outside of the other men serving the gun.

SPUNGE—(TWO MOTIONS.)

1st. Take a step with the left foot, so as to take up a position to the right rear of the first server on the left, receive a charge with both hands; holding the shot in the right one, the cartridge in the left one, nails uppermost.

2nd. Give the charge to the first servant on the left, step out to the right with the right foot, so as to come opposite the nave, and bring up the left foot.

RAM HOME.

Stand fast; and, as soon as your haversack is exhausted, return to supply it afresh.

TAKE POST.

Place yourself, by stepping out with the right foot, abreast of the *centre de mire*, and at eighteen inches outside the wheel; bring up the left foot, and stand fast in the position of a soldier without arms.

TILE POINTER.

Q. What is the second re-inforce ring?

A. That part of the gun comprised between the astragal and the first mouldings.

Q. The breech?

A. The rear of the piece from the bottom of the bore ; it terminates in a round salient part called the cascable.

Q. The trail?

A. The rounded part of the cheek, which rests upon the ground, when the piece is in position.

Q. The handspikes?

A. There are different sorts of handspikes : the *petit bout*, terminated by a ring ; the *corps*, furnished with a catch ; the *gros bout*, with a ferrule round it.* They are called manœuvring handspikes, when they are placed athwart the piece, in rings destined to receive them, and which are called manœuvring rings ; and handspikes for laying the piece, when they are in rear of the carriage in the rings called the traversing rings.

Q. The trail transom hooks?

A. Are placed upon the cheeks, opposite the trail transom.

Q. The elevating screw?

A. Serves to elevate or depress the breech : its horn consists of four branches, by means of which the screw is turned.

Q. The priming iron?

A. Is an iron rod fastened in a wooden handle : it is used to prick the cartridge with before priming.

Q. The tube pouch?

A. Consists of three parts ; the pouch, properly so called, the belt, and the flap, into which the priming iron is fastened.

The tube^t is composed of a reed filled with composition, which is passed down the vent, and of four strands of quick match, called the cup, which remain outside for the purpose of fire being communicated to them..

* In the British service we have but two descriptions of handspikes, the common, and the traversing, consequently, we have no corresponding terms for these. The common handspike is used for manning the wheels of siege guns & the traversing, for laying all kinds of ordnance. (Trans.)

† Tubes have long been disused in the British service. Percussion tubes are, of course, required, when percussion locks are used. (Trans.)

Q. *The thumb stall?**

A. Serves the pointer (No. 4 in the Britisk service) to stop the vent, when loading.

TAKE POST.

Put yourself in the position of a man without arms, abreast to the centre of the traversing handspike, eighteen inches outside the wheel, the left shoulder towards the enemy.

FOR ACTION.

Stand fast.

LOAD—(2 MOTIONS.)

1st. Make a half face to the left upon the left heel; bring the right foot parallel to the cheek, abreast of the trail transom ring, and at three inches from the trail transom; bring up the left foot.

2nd. Bring the left foot abreast of the *centre de mire*, extending the right knee, and bending the left, raising the right heel, seize one of the branches of the elevating screw with the right hand, place the left, with the middle finger firmly pressed upon the vent, the thumb behind the base ring; with the right hand, elevate or depress the breech by the elevating screw, to enable the piece to be more easily loaded.

SPUNGE.

Continue to serve the vent, quit the elevating screw, in order to correct the direction of the piece; the right hand placed between the cheeks indicating the way in which the trail is to be moved, by tapping lightly with the back of the hand upon the right cheek and with the palm upon the left one.

RAM HOME—(3 MOTIONS.)

1st. Bring back the hand to the elevating screw, in order to give the elevation: the piece having been laid, rise upon the left leg, bringing up the right one, the arms hanging naturally.

2nd. Seize the priming iron with the right hand, putting the thumb on the head of the handle; take a tube in the left hand;

* Thumb stalls are exceedingly dangerous. Nothing can serve the vent so effectually as the man's thumb. (Trans.)

prick the cartridge and put the tube in the vent, the ends of the quick match turned to the right side of the piece ; and ascertain with a rapid glance whether the men serving the gun have resumed their position for action.

3d. Face to the half right upon the left heel; step off with the right foot to fall back two paces, so as to come exactly abreast of the traversing handspike, and at eighteen inches outside the wheel; bring up the right foot, making a three quarters face to the left, upon the point of the left toe, so as to front the handspikes; stretch out the right arm to the front as a signal for firing; put up the priming iron, and resume the position of a soldier without arms.

TAKE POST.

Stand fast.

THE POINTERS.*

TAKE POST.

Take the position of a soldier without arms, on the right of the piece, abreast of the centre of the traversing handspikes, eighteen inches outside the wheel, right shoulder towards the enemy.

FOR ACTION—(2 MOTIONS.)

1st. Make a half face to the left on the left heel, bring the right foot up to six inches, and abreast of the small end of the traversing handspike (*petit bout du levier de pointage*), on the right, bring up the left foot.

2d. Make a three-quarter face to the right upon the toe of the right foot; bring the left foot six inches outside, and abreast of the small end of the left traversing handspike; grasp the traversing handspikes, rails uppermost; bending both knees at the same time; support the elbows upon the thighs above the knees, exert yourself to lay the piece in the direction of the object.

LOAD.

Continue to grasp the handspikes; remain fast in the position pointed out at the end of the last word of command.

* Answering to No. 1 of the British Service. (Trans.)

SPUNGE.

At the signals of the pointer gently move the trail in the direction indicated.

RAM HOME—(2 MOTIONS.)

1st. The pointer having pricked and primed, let go the handspikes, rise upon the right leg, bringing up the left foot.

2d. Make a half face to the right upon the right heel; bring the left foot abreast of the traversing handspikes, eighteen inches outside the wheel, bring up the right foot, in returning into position by a three quarters left face on the toe.

TAKE POST.

Stand fast.

SECOND SERVER ON THE RIGHT.

Q. How is the sponge staff carried on the gun?

A. By a straight pointed hook, placed on the upper end of the cheek, and a forked hook situated to the rear of the curve of the cheek. A small pin passes through this last.

Q. What is the situation of the drag washer?

A. At the end of the axle, between the axle and the nave.

Q. Of what use is the bucket?

A. To hold the water, with which the sponge is damped,* in order to cool the gun, and to extinguish the burning fragments which may remain in the bore, after the pièce has been fired. It swings from a hook placed towards the centre of the right cheek.†

Q. What is a port fire?

A. It is a cylindrical paper tube, filled with a composition, and used for igniting the tube.

* The sponge should not be dipped in the bucket, but merely have water sprinkled on it with the hand. (Trans.)

† This is a very awkward position for the bucket hook; in manœuvring, the bucket would be constantly striking against the right wheel. The English position is much better, the hook being attached to the centre of the gun axle. (Trans.)

*Q. What is a portfire case?**

A. The case in which the portfires are kept.

Q. What is a portfire stock?

A. It is a portfire holder properly so called, into which the portfire is put, and held fast by a sliding ring, with a wooden handle tapering to the other end.†

Q. What is a linstock?

A. It is a staff, two or three feet long, with an iron pointed shoe at one end to stick into the ground, and cloven at the other, to receive the end of the slow match rolled round it.

Q. The second server, equipped with a box of portfires, hanging from over the right shoulder to the left hip, with a linstock, and a portfire stock, will support these two last over his left fore arm, the left hand holding them four inches from the end the rails uppermost, and the right hand hanging naturally by the side.‡

TAKE POST.

Place yourself abreast of the *centre de mire*, eighteen inches outside the wheel, in the position of a soldier without arms, the left arm remaining bent; the right shoulder towards the enemy.

FOR ACTION.

Make a half face to the left, upon the left heel, seize the linstock with the right hand, close to the match, in order to plant it to the left rear, rise upon the right leg, and again front the gun.

LOAD—(2 MOTIONS.)

1st. Throw out the right leg, bringing the heel abreast of the wheel, seize the traversing handspikes with the right hand, nails

* There is no such thing in the British service, and the portfires being twenty-one inches long, its introduction would be impossible, even if desirable. The spare portfires are carried in the limber, one burning sixteen minutes. The French *lances à feu* are much smaller and burn more rapidly. (Trans.)

† We have paraphrased this term, preferring the construction of the English linstock, which has iron jaws, with a screw to hold the match light. (Trans.)

‡ This arrangement is most awkward: when the portfire is used, the linstock should be driven into the ground to the left of, and well clear of, the gun; No. 5 lights his portfire at it when the word "Load" is given. As the man, who fires in the French Artillery, answers to our No. 4, on the right, the position of the linstock would, of course, be reversed. (Trans.)

uppermost, and move them until they touch the left cheek ; then take the bucket with the right hand, the three last fingers passed under the ear, the handle held between the forefinger placed to its right and rear, and the thumb bent to the left and forward.

2d. Take away the bucket, rising upon the left leg ; as soon as the knee is clear of the wheel, throw out the right leg about two feet, hook the bucket on to the drag washer, the position of the right hand remaining the same ; rise upon the left leg, and bring up the right foot.*

SPUNGE.

Make a half face to the left, take the portfire with the right hand, the left fore arm supporting the case, shut the lid, fix the portfire in the portfire stock, seize it with the right hand, the nails downwards, towards the extremity of the handle, light the portfire, bring back the left hand, in order to place it at six inches from the right, the nails likewise downwards, and hold the portfire stock inclined from right to left ; the portfire, a few inches from the ground.

RAM HOME—(2 MOTIONS.)

1st. The pointer, (No. 1,) having left the *centre de mire* to fall back into his position, let go the portfire stock with the left hand, stepping out with the right leg, and the palm of the left hand resting upon the end of the handspikes, slope them back so that they pass both cheeks alike, rise upon the left leg, and bring up the right foot.

2d. At the signal of the pointer, (No. 1,) bring up the portfire to the vent field, making it pass close to the ground, touch the quick match of the tube with the flame, the right arm extended and raised, nails uppermost ; as soon as it has ignited, withdraw the portfire, pointing it towards the ground, and bringing the hand sharply back to the left ; put the left hand again in the same position as at the word of command, "spunge."

TAKE POST—(3 MOTIONS.)

1st. Bring up the left hand again to seize the portfire stock, nails uppermost, let it go with the right hand, step out with the

* The bracket, in the British service remains throughout suspended in its original position. (Trans.)

left leg, cut off, whilst stooping, the portfire half an inch above the flame ; take again the linstock with the left hand, rise upon the right leg, bring up the left foot, rest the linstock and portfire stock upon the left arm, as you fall back by a three quarters face to the right, fronting the piece.

A. Step out with the right foot two feet towards the nave ; seize, whilst stooping, the bucket with the right hand, the handle held between the forefinger and thumb.

A. Throw the weight of the body upon the left leg, in order to be able to move the right foot, the heel abreast of the wheel, hang the bucket upon the bucket hook, rest upon the left leg, bring up the right foot and stand fast.

Q. *In action, do you issue all the words of command laid down above ?*

A. No ; but merely, "take post for action ; load." At this last word, the loading is carried on at once, but taking care to perform all the principal motions. The bucket is only hooked on again, when there is a change of position.

Q. *Why do the first servers (Nos. 2 and 3) step to the rear, when the piece is about to be fired ?*

A. To avoid the danger to which they would be exposed (by the explosion) and to protect their hearing from the powerful impression which the discharge makes on the column of air in its front.

Q. *Why are the ammunition haversacks closed ?*

A. To prevent the accidents, which might arise from the fire being communicated to the ammunition.

Q. *Why does the pointer (No. 4) press his thumb tightly on the vent during the whole process of loading ?*

A. In order to close it hermetically, so that there may be no current of air in the gun, and thus guard against the fire being fanned which may have been retained by some fragments (of the cartridge bag) after the previous discharge ; this fire being communicated to the fresh charge, most serious accidents might be the result.

Q. Why do the servers keep eighteen inches clear of the outside of the wheels ? why do not the pointers remain in rear of the gun when it is fired ?

A. Because the discharge imparts a violent recoil to the piece, which would seriously injure those, who should be so imprudent as to remain in its way.

Q. Why does the second server on the right turn his hand, the nails uppermost, when he fires ?

A. Because, if the quick match ignited too rapidly, and the gun were to go off, whilst the portfire was still over the vent, it is to be apprehended that the explosion, which always finds vent through this aperture, might force the portfire out of his hand, and seriously wound the man ; whilst, when the nails are uppermost, if this accident should happen, the portfire would be blown out of his hand without hurting him.

Q. Who judges the range of the shot ?

A. The officer, or non-commissioned officer, commanding the gun.

Q. Where does he place himself for that purpose ?

A. To windward, in order that the smoke from the piece may not intercept his view.

Q. Why does the man, who lays the gun, not also step to one side, in order to form an opinion as to whether the shot has struck the object.

A. He does so in action, when the firing ought not to be too rapid, and the guns are at wide intervals.

Q. When the recoil has been very great, is not the gun run up again to its former position ?

A. Yes ; and, for this purpose, the men serving it, man the wheels.

* POUNDER.

Q. Are not four pounders furnished with a sponge staff different from other guns ?

A. Yes, the sponge has a short staff, (*à hampe recourbée*) terminating at one end in a sponge head, and, at the other, in a hollow head, (*poignée*), fastened to the staff by a socket pin.

The modifications in using it are the following:

FIRST SERVANT ON THE RIGHT.

TAKE POST.

Place yourself as before, and hold the sponge staff thus: the handle in the right hand, nails downwards; the staff in the left hand, nails uppermost; the arms hanging naturally; the staff resting on the right fore-arm, and touching it by the part near to the socket pin.

FOR ACTION.

As before.

LOAD—(4 MOTIONS.)

1st. Rest the weight of the body upon the right leg, and bring up the left; extend the right arm in a line with the shoulders; let the staff at the same time slide through the left hand as far as the ferrule, bending the left arm, elbow to the body, so as to bring the sponge head close to the left shoulder, the staff on a level with the rammer head.

2nd and 3d, as before.

4th. Enter the sponge into the bore, send it home, straightening the right knee, and bending the left; place the left hand at the same time upon the flat of the thigh, keep the feet fast, the body upright, and the shoulders square.

SPUNGE—(2 MOTIONS.)

1st. Turn the sponge at the bottom of the bore, the rammer head end pressing upwards against the bore; draw it towards you by a contrary movement; send it home again, with a pressure against the lower part of the bore, and force it upwards until it touches the bottom of the vent, the right hand not quitting the rammer head; the palm and the nails to the front; bring back the hand to the position in which it was before the word was given.

2d. Spring the sponge, the staff in the direction of the prolongation of the bore, straightening the left knee, and bending the right, the right arm extended ; let the sponge fall into the left hand, placed to receive it at four inches below the muzzle, and seize it near the ferrule, the nails downwards.

RAM HOME—(6 MOTIONS.)

1st. Enter the sponge into the bore, ram home the charge sharply to the bottom of the bore, straightening the right knee, and bending the left : at the same time place the left hand flat on the thigh.

2d. As before.

3d. Bring back the sponge close to the left shoulder, bending the left arm, elbow close to the body ; rest upon the left leg, and bring up the right foot.

4th. Take a long step to the rear with the right foot, so as to bring it into the position from which it set out ; and bring up the left foot.

5th. Resume position for action.

6th. *Take post* as before.

FIRST SERVER ON THE LEFT.

This server carries an ammunition haversack.*

LOAD—(3 MOTIONS.)

3d. Take a round from those that are in the haversack, and hold it in front of you ; the shot in the left hand, the bag in the right, nails uppermost, the arms hanging naturally.

SPUNGE.

The sponge having been sprung, introduce the charge into the bore.

SECOND SERVER ON THE LEFT.

Face to the right, and run to the dépôt of ammunition ; there fill the haversack, and return sharply : deliver the charges to the

* This is most objectionable. No. 3 should never have more than the one round required for loading ; otherwise, he incurs great risk of being blown up. (Trans.)

first server on the left, who receives them into the haversack, with which he is provided.

Continue to do this until the word is given. "Take post."

Then return to the first position.

Q. When you have to serve a howitzer, are not the motions different?

A. Yes.

HOWITZERS.

Q. How many men are required to serve a howitzer ?

A. Six, whose position is the same as for guns.

Q. In what does the bore of a howitzer differ from that of a gun ?

A. In the termination of the cylinder, intended to receive the powder being much smaller. This part is called the chamber of the howitzer.

Q. Of how many parts is the charge composed ?

*A. Of two : the powder contained in a bag, in which we make the distinction of the bottom, and mouth, (and the shell).**

Q. What is a shell ?

A. A shell is a hollow shot, pierced with a hole, called the fuze hole ; the shell is loaded with a certain quantity of powder ; and a fuze, driven firmly into the fuze hole, communicating fire to this powder, bursts the shell. A piece of parchment tied over the fuze and covered with mastich, serves to preserve it until the moment when the shell is to be fired : the parchment is then removed, and this operation is called uncapping the fuze.†

FIRST SERVER ON THE RIGHT.

TAKE POST.

Fall into a position of a soldier without arms, eighteen inches outside the wheel, the right shoulder towards the enemy, and the

* The words between brackets are not in the original, but it is evidently an oversight. (Trans.)

† This answer is very vague, but will do for a work which merely professes to give an outline of artillery, and as no government ever contemplated initiating other arms into the mysteries of artillery, we shall not go deeper into the subject than our author has done. (Trans.)

left side ten inches in advance of the wheel; hold the sponge staff with both hands, the nails uppermost, the left hand close to the sponge head, the right hand about eighteen inches from the left, the arms hanging naturally.

FOR ACTION—(2 MOTIONS)

1st. Throw out the left foot twelve inches from the right one, the line of the heels parallel to the wheel, bend the left knee, straightening the right at the same time, feet equally turned out, the body upright on the hips, the position of the hands remaining the same.

LOAD—(5 MOTIONS.)

1st. Bear upon the right leg and bring up the left foot; at the same time raise the sponge staff to the height of the shoulders, elbow to the body, so as to bring the sponge head near the shoulder.

2nd. Throw the right foot twelve inches off to the right, and bring up the left.

3d. Place the left foot at an equal distance from the wheel and from the howitzer, the left side in line with the front of the wheels; bring up the right foot.

4th. Separate the right foot twelve inches from the left, the heels in a line parallel to the direction of the howitzer, and bring up the sponge head to the face of the muzzle without entering it, the staff in the prolongation of the bore; the feet equally turned out; the body upright on the haunches; the shoulders square and thrown back.

5th. Send the sponge head home into the chamber, letting the staff glide through the left hand; place this hand, nails downwards, at six inches from the right.

SPUNGE—(3 MOTIONS.)

1st. Turn the sponge in the chamber three or four times, draw it towards you, and with the sponge clean the chamber of whatever may be in it.

2d. Sprung the sponge altogether, and seize it in the middle with the right hand.

3d. The same as the fourth motion in spunging guns.

RAM HOME--(5 MOTIONS.)

1st. Enter the rammer head till it touches the charge, as soon as it has been placed in the chamber;* press it lightly home; spring the rammer, and seize it in the middle with the right hand, the staff in the prolongation of the bore.

2d. The same as in the fourth movement of "ram home" in the gun drill.

3d. Take a long step backwards with the right foot, in order to bring it back to the position whence it started, bring up the left foot, whilst turning the sponge; receive the staff in the left hand close to the sponge head, turn the right hand briskly, so as to place it, nails uppermost, about eighteen inches from the left.

4th. Throw off the left foot twelve inches and bring up the right

5th. Resume the position "*for action.*"

TAKE POST -(2 MOTIONS)

1st. Rest upon the right leg, bring up the left foot.

2d. Throw out the right foot twelve inches from the left, and remain steady

STAND AT EASE.

Put the sponge staff against the nave, the rammer head on the ground, and the sponge pointing upwards.

FIRST SERVER ON THE LEFT.

Q. What are manchettes?

A. They are sleeves made of coarse cloth, which the first server on the left puts on, in order to preserve his jacket sleeve from being soiled, when he passes his arm down the bore of the howitzer.[†]

TAKE POST.

Place yourself in the position of a soldier without arms, eighteen inches outside the wheel, the left shoulder towards the enemy, the right side ten inches in advance of the wheel.

* For the benefit of those who have not studied artillery, we may as well mention that, owing to the shortness of the bore of a howitzer, the charge can be set home by hand, and is usually thus done with the lighter pieces, which explains the subject of the next note. (Trans.)

† We have no *manchettes* in the British service; but unquestionably the introduction of them would greatly save the men's regimental jackets. (Trans.)

FOR ACTION—(2 MOTIONS.)

1st. Plant the right foot twelve inches from the left, the line of the heels parallel to the wheel; bring up the left foot.

2d. Step out two feet from the right leg, the line of the heels remaining parallel to the wheel; bend the right knee, straightening the left; the feet equally turned out; the body upright on the hips.

LOAD—(3 MOTIONS.)

1st. Rest the weight of the body upon the left leg, bring up the right foot.

2d. Throw out the left foot twelve inches; bring up the right.

3d. Plant the right foot at an equal distance from the wheel and the howitzer; the right side abreast of the forepart of the wheel, bring up the left foot.

SPUNGE.

Receive by the right the cartridge in the left hand, seizing it by the mouth, and, when the first server on the right (No. 2) has sprung the sponge, step out twelve inches from the right leg towards the howitzer; put the cartridge with the left hand into the chamber, bottom first, resting with the right hand on the upper end of the check; rest upon the left leg.

RAM HOME—(5 MOTIONS.)

1st. Receive by the right the shell from the hands of the man, who brings it up, the right hand placed underneath the shell, supporting it with the left; seize the fuze with the thumb and forefinger bent, the other three fingers pointing down the shell; thus bring it to the muzzle of the howitzer, stepping out twelve inches from the right foot, enter it and guide it with the left hand only as far as the chamber, resting with the right hand upon the upper part of the check; withdraw the left hand.

2d. The arm being freed, rest upon the left leg; satisfy yourself with a glance that the shell is correctly placed; if the fuze is not in the centre of the bore, draw it by introducing the left hand afresh into the howitzer.

3d. Take a long step to the rear with the left foot, to bring it back to the position which it had quitted, bring up the right.

4th. Step out twelve inches to the right with the right foot, and bring up the left.

5th. Resume position "*for action.*"

TAKE POST—(2 MOTIONS.)

1st. Rest upon the left leg, bring up the right foot.

2d. Step out twelve inches to the left with the left foot; bring up the right foot, and stand fast.

SECOND POINTER SERVERS.

POINTER SERVER.

The same as for guns.

The man, who supplies the piece with ammunition, receives from the ammunition dépôt (from the limber in the British service), each time a cartridge, which he puts into his ammunition haversack, and an uncapped shell;* which he carries in both his hands joined together before him; when he receives the cartridge into his haversack, and whilst he delivers it to the first server (No. 3) holding it by the bottom, the right hand alone supports the shell, pressing it against his waist.†

LAYING A GUN.

Q. What is to be understood by laying a gun?

A. It is the placing of it, in all its parts, in such a manner that the projectile, which it throws, may hit the object, at which it is aimed.

Q. What is the axis of the piece?

* The shell ought not to be uncapped before it is brought up to the piece, and should be dredged as soon as introduced into the muzzle, to ensure the ignition of the fuze. (Trans.)

† The artillerist will perceive by the foregoing how essentially the French gun drill differs from our own. We had intended at first to substitute the latter for it in this portion of the work, in order to be more extensively useful; but, reflecting that such of the infantry, as are drilled to field pieces, receive the regular instruction, we conceived that such a violent alteration of our author was hardly requisite, whilst the retention of the original enables the reader to compare the two systems. Our light cavalry are not drilled to it: that they should be so, there is no question, and the author's reasoning to that effect is perfectly correct. (Trans.)

A. The term, axis of the piece, is applied to an imaginary straight line passing through the middle of the bore throughout its length : this line, supposed to be indefinitely prolonged, takes the name of the line of the axis.

Q. What is the line of sight?

A. It is a line which, passing through the highest part of the breech and the swell of the muzzle, at one end strikes the object aimed at, and at the other, the eye of the man laying the piece. In guns, the base ring of the breech being higher than the swell of the muzzle, the line of sight inclines towards the line of the axis, and consequently intersects it beyond the muzzle.

Q. How does the shot quit the piece?

A. In the direction of the axis ; but the action of gravity giving it a tendency downwards, at the same time that the impulse which it has received in the bore drives it forwards, it departs more and more at each second from the line of the axis, and finally strikes the ground ; the line, which it pursues in this course, is called the line of fire, or the trajectory ; touching for a second the line of the axis, the line of fire passes along with it above the line of sight at a short distance from the gun ;* but, having a constant tendency downwards, it intersects it afresh, and passes below it.

Q. The objects placed upon the line of fire being evidently the only ones that the shot will strike : in order to obtain our end, ought the point we wish to hit lie upon that line ?

A. Yes ; but it ought also to be in front upon this line of fire, it can only be at one of the points where this line is intersected by the line of fire : the first, being too close to the muzzle of the piece, is of no use in practice, and it is the second only which ought to be taken into consideration ; this point, where the line of fire again intersects the line of sight is called "point blank."

Q. At what distance is "point blank" for each calibre ?

A. The person laying the piece, having placed himself in the

* This is a common error among non-professional men, known by the term of "the shot rising," whereas its tendency is to rise or fall, according as its last bound in the bore is against the under or lower surface. According to Lombard, the difference between the angle of projection and the angle of fire has a medium of 10°, either above or below the axis, and it sometimes amounts to as much as 3°. (Trans.)

position laid down in the gun drill, stoops so as to bring his head on a level with the breech, shuts the left eye, and bringing the other to within about three inches from the base ring, he causes the direction of the piece to be altered, by the movements which he orders to be made with the trail; and the elevation, by means of the elevating screw, so that the line of sight strikes the object.

The point blank for field pieces with the full service charge is:

For 12 pounders	510 yards
" 8 do.	520 "
" 6 do.	520 "
" 4 do.	500 ",*

Q. But supposing that the object being situated beyond point blank range, the piece were to remain pointed in the same manner?

A. The shot, attaining always the same point, and constantly falling lower, would pass below the line of sight, and would not hit the object situated on that line; it is necessary, in order that we may reach it, to remove the intersection of the line of fire with the line of sight further off, and we attain this end by elevating the chase of the gun; but then the line of sight continuing to pass through the object and the most elevated part of the swell of the muzzle, causes the breech to be depressed to a certain point below it: in order to measure this depression, and at the same time supply the fixed point which the line of sight would have upon

* Lombard in the *Aide Memoire Francaise*, gives still higher point blank ranges, thus:

12 pounder	551 metres or 606 yards
8 pounder	512 metres or 560 yards.

But their point blank differs essentially from ours (see note page 273) and our point blank ranges, which we here give, are much lower:

The point blank ranges of English ordnance are as follows:

Guns,	21 pounder iron	360 yards	With round shot
	18 " "	360 "	
	12 " "	360 "	
	9 " bras.	300 "	
	6 " "	200 "	
Howitzers,	24 pounder bras.	250 "	With common shells.
	12 pounder brass.	200 "	
	10 inch iron,	180 "	
	8 inch iron,	170 "	

the breech, we make use of the tangent scale, (*hausse*), so called because it serves to elevate the line of sight.*

Q. What is the tangent scale?

A. The tangent scale is a brass, or wooden,† plate, divided into lines: those made of brass are fitted to the breech of most field guns; they slide in a groove, and are checked at the proper height by a screw which bears against them; those made of wood are carried in the tube pouch, and the man laying the gun uses them by applying them behind the base ring of the breech.

The *hausse* is also composed of two uprights divided into lines, connected by two cross pieces, one above and the other below, and of a moveable traverse, bearing a notched sight, which slides along the uprights: this *hausse* is used in laying howitzers.‡

Q. What is the result of employing the tangent scale?

A. The following rule: in order to aim at an object beyond point blank, we must first lay the piece as for point blank firing, and the man laying it, having been previously told by the officer in command of the piece, sets the tangent scale at the number of lines pointed out to him; he then lowers the breech, until, as he looks over the top of the tangent scale and the swell of the muzzle, he again catches sight of the object.

The officer commanding the piece, in order to give this elevation, ought to know the distance of the object and the number of lines that correspond to it: the distance of the object is sometimes given to him; in most cases, he is obliged to guess it by the eye; and cannot do this so as to be near the mark, until he has repeatedly exercised himself in estimates of this nature. Tables calculated for this purpose will then teach him the corresponding elevations; but, as it is difficult to retain these tables in the memory, we may establish it, as a general rule, in which we shall always find a sufficient approximation, that:

* The interpretation given in the text applies, of course, only to the French term *hausse*, which is derived from the verb, *hausser*; to raise. (Trans.)

† Wooden tangent scales are unknown in the British service. The brass ones are half cylinders, the degrees of elevation are marked on the flat surface to the rear, and the ranges in yards on the hemispherical side. (Trans.)

‡ We have no such instrument in the British service, and it is a very clumsy one. (Trans.)

*When we fire beyond point blank, we should give two lines of elevation for every fifty yards beyond that distance.**

Q. When the object aimed at is nearer than point blank?

*A. It is readily perceived that the shot will pass above the object, if we were to aim with the usual sight; and it would be necessary in order to work in a manner analogous to that pointed out for the position removed beyond it, to bring the point of intersection between the line of fire and the line of sight, by lowering the point through which the sight is taken at the breech; but this correction being impossible, the piece is pointed by directing the line of sight below the object aimed at, so much relatively to its distance, that is to say, *for each fifty yards on the hither side of point blank, we should aim one foot below the object, up to half point blank distance; and from this half distance, to diminish the lowering of one foot in proportion as the object comes to within forty yards of the muzzle of the piece.**

Q. What regulates the establishment of the line of sight?

A. The knowledge of the highest parts of the breech and the swell of the muzzle; these points have been distinguished in a great number of pieces, by cutting a notch, called the sight, upon the breech, and by placing a small prominence on the swell of the muzzle, termed the dispart.

The consideration of these two points facilitates the laying of the gun, when it is placed upon level ground, but it would induce error when one wheel is higher than another; in this case, the line of sight, inclined from the side on which the wheel is lowest, would no longer intersect the line of fire, which, from the first, is confounded with it.

Q. This having been observed, what ought one to do?

A. Always endeavor to plant the piece so that the wheels shall be equally high, but if we are compelled to take up our position on a sloping ground, we must pay no attention to the sight

* With the English 9 pounder, every $\frac{1}{2}$ of a degree gives an extra hundred yards from point blank up to 1° and 75 yards from 1° up to 2° . With the 6 pounder every $\frac{1}{2}$ degree gives an extra hundred yards from point blank up to 1° and 50 yards from 1° up to 2° . (Trans.)

and the dispart, but direct the line of sight by those parts of the breech and the swell of the muzzle, which are the highest with reference to the actual position of the piece.

Q. And if, in order to make use of the tangent scale, we direct the line of sight by the sight, and the dispart?

A. We must lay the gun above the object, and to the right or left from the side on which the wheel stands the highest, and make these rectifications more marked in proportion as the difference of level is greater, and the object further off.

Q. How are howitzers laid?

A. By the same rules as guns; but, as in this description of ordnance, the highest points of the breech and muzzle are in a plane parallel to the axis, the line of sight, being then parallel to that of the axis, can no longer intersect that line, nor consequently the line of fire which is always below it. Consequently, the howitzer has no point blank; and, whatever may be the distance at which we fire, we must employ the tangent scale in order to obtain the intersection of the line of fire with the line of sight, in which the principle of laying a gun consists.*

Q. In order to supply the want of tables of ranges for howitzers, as you have done for guns, by giving a point of departure which takes the place of point blank, what rule would you lay down?

A. Firing a howitzer at 200 yards, give twelve lines of elevation (English point blank), and add four lines (English $\frac{1}{2}$ of a degree) for every fifty yards beyond it.

MOVEMENTS.

Q. What is the prolonge?

A. The rope which connects the gun with the limber; when the piece is not limbered up, all movements in action are made with the prolonge.

* The author is perfectly correct in stating that the highest points of the breech and muzzle of a howitzer are parallel to the axis of the bore, except in the 12 and 24 pounders, which have a small patch at the muzzle to make up the difference. The English point blank is when the quadrant stands at 0° . The French point blank actually gives about a degree of elevation, which accounts for the superiority of range. (Trans.)

When a piece has a long distance to travel, it must be limbered up for that purpose.

Q. How many rounds does the small limber box contain ?

A. The small limber boxes of the artillery of different European powers do not, like the waggons, contain the same quantity ; nevertheless, they are not essentially different ; thus, we have their contents pretty nearly when we know those of the French.

The small limber boxes of the 12 pounder contain 9 rounds.

Those of the 8 pounder 15 do.

— 6 pounder 12 do.

— 4 pounder 18 do.

This knowledge is useful to possess, when you perceive that the guns firing upon you are deprived of their waggons, and have only their small limber boxes to depend upon. You can then easily guess, by the number of rounds fired against you of the exhaustion of the enemy's ammunition, and of the opportunity offered you of charging his guns.*

* The limber boxes of the British Artillery carry several rounds more than the above, and therefore the guns can maintain themselves in action much longer. The text is a striking commentary on the faultiness of the French construction. (Trans.)

CHAPTER XXXIII.

OF PARTISANS.

Q. What is the meaning of partisan ?

A. A detachment is in partisan, when it operates detached and isolated from the army, and under the genius of its leader, which is not controlled except by orders given in a general manner, and by the indications of the combined movements of the army.

„ A partisan is sent to raise a province ; to harass the flanks and rear of the enemy's army ; to carry off, or destroy dépôts, convoys, &c. ; to make prisoners ; and sometimes to deceive the enemy as to the movements of our army.

Q. What is the first care of an officer directed to carry on partisan warfare ?

A. It is to be scrupulously careful that the detachment, which he commands, is composed of bold and well mounted troopers.

Q. And the second ?

A. To receive from his general an accurate map of the country in which the scene of his operations is, and as correct information as is procurable regarding the dispositions of the enemy, and the plans which he is supposed to have formed ; and further to have an eye upon the present and future movements of our different *corps d' armée*.

Q. Why should he care about this last, when he is acting independently ?

A. In order to know whether he should send his reports, and to find a support to his retreat, should he find himself hard pressed.

The profession of a partisan is a hazardous one. It can only be properly followed out by a skilful, rapid, and bold leader, and by a body of men resembling him. No more rest for the partisan ; he ought always to have his eyes open, and if fatigue compels him to snatch a momentary slumber, it is necessary that an advanced line of spies should watch over and warn him.

The war, which he carries on, is piratical. The strength of his warfare lies in surprise. The kite unperceived, which makes a sudden swoop at its prey, bears it off, and vanishes, is the image of the partisan ! Let him then inflict a decided, prompt, and, if necessary, even terrible, blow, and let no traces point out his retreat.

Every stratagem of war is at the disposal of the partisan. Let him combine his attack so judiciously, and fling his lasso so accurately around the enemy, whom he surprises, that not an individual can escape to give the alarm.

Such a one in an enemy's country, manœuvres with the enemy, levies in his name contributions of clothing and horses, and fresh clothes and remounts his detachment at the expense of the king of Prussia.

Such another strips his prisoners, clothes his men in their uniforms, enters the unsuspecting bivouacs of the enemy, whom he surprises and cuts to pieces.

Another one, at twenty leagues in rear of the Russian army, recaptures our prisoners, whom he mounts upon the horses of their escort, and thus doubles his force.

Such another carries off a park of artillery. The enemy, informed of it, hastens up two hours afterwards, and, by the time that he reaches the smouldering remains of his blown up waggons, the partisan deals a blow equally severe three leagues in his rear.

The enemy, utterly ignorant of the numerical force of this daring band, halts, takes up a position, and forms those detachments in mass, which would have been a splendid reinforcement to his own army, and our's profits by the delay.

Such another, lastly, like the brave and illustrious Pole Uminski, at the head of a few squadrons, penetrates through the ene-

my's army, raises a province, makes a powerful diversion, and, after several victories, when compelled to retreat, rejoins the national army with his forces trebled.

The partisan, owing to the isolation in which he is placed, and owing to his not being compelled to march immediately in such or such a direction, or to retire upon a certain point, is not trammelled or fettered in any way : he is master of the whole country, which his eye takes in ; let him survey it with no ordinary intelligence, and let him conceive it in his imagination, not so much as viewed from the spot where he stands, as from the point of view of the enemy. Thus, let him calculate the hollows, the heights, the natural screens, in their connection with this point of view, and let him always post himself in such a manner as to intercept by these screens the visual ray which the enemy might direct towards him.

If he descend by this path, the rising ground on his right will conceal his movements. If he traverse the plain in that direction, the little wood, which is to be seen on his left, will mask his march for the next ten minutes, and these ten minutes will be sufficient to enable him to gain the ravine, in which he may conceal himself.

The partisan, acting only by surprise, the offensive positions which he takes up are invariably ambuscades. The closer they are to the point of attack, the better ; but it is requisite that this proximity should always be calculated with reference to the greater or less confidence and vigilance of the enemy.

The partisan, after having boldly swept off a convoy, commences his retreat. It is necessary that this retreat should be prompt, for the enemy may receive intelligence, and pursue with superior forces. He therefore compares the importance and the possibility of preserving the prize, which he has captured, with that of the attack which he may have to sustain, and of the rapidity with which he is obliged to make his retreat. This rapid comparison will cause him to destroy every thing, which would dangerously retard him, and he retreats, not by the road, which he has followed in gaining the spot, but by that which contracts the distance that he will

have to travel over in order to gain a place of safety. The undulations of the ground, the woods, the ravines, mask his retreat, and he does not halt until after he has been some hours on the road; because he is aware that the pursuit of the enemy is never pushed beyond a certain distance; and that the further it is carried, the more languid and less dangerous it becomes, especially if the pursuers are led by the pursued over a difficult and intersected country, causing apprehensions of ambuscades.

If, however, the pursuing enemy appears at some distance, and threatens to attack briskly and powerfully; the partisan does not hesitate to put him on a wrong scent. He makes the convoy file off under an officer, whom he enjoins to proceed rapidly, and, in the case of being attacked, to abandon every thing which he deems it impossible to save. Then, with the bulk of his body, he proceeds either to the right or left, draws the misled enemy in that direction, whom he thus carries to a distance from his object.

A partisan, knocked up with long continued duties, and who needs repose, ought either to gain one of our posts, situated in rear of the enemy, and which is not invested by the enemy, or to throw himself suddenly beyond the line of his operations. In general, this line, in rear of the enemy's dispositions, is confined to some roads, held by detachments on their way to rejoin, and patrolled to very short distances.

The partisan has, then, only a few leagues to traverse to place himself in safety, nevertheless, in order to render this security more complete, he frequently changes his position.

If the partisan have some sick and wounded, he carries them along with him, and is lavish of his care of them. If the diseases or wounds are too severe to admit of the men laboring under them keeping up with him without retarding his rapid marches, he places them in the villages, and entrusts them to men of mark upon their personal responsibility.

If the partisan have made prisoners, in order not to weaken his strength, he confides the care of them, in a friendly country, to the care of the national rural guards, who take them to our army by round about ways.

If the partisan have captured guns, and cannot convey them in safety to our army, he buries them privately, and especially out of view of his prisoners, in a wood seldom frequented, and marks the spot where they are concealed. He then carries off the limbers with him, which he destroys at some leagues farther off; thus the place of their concealment is entirely unknown.

As a general rule, as the partisan ought to be in the highest state of mobility, he should retain nothing with him that can retard or encumber his march.

CHAPTER XXXIV.

OF LED HORSES AND SUTLERS.

Q. What do you understand by led horses?

A. The collection together of the horses of the regiment, which are not mounted by their riders, and are led either by men of the corps or servants of the officers.

Q. Where do they march in war time?

A. With the regiment, and on that hand which is least exposed to the attacks of the enemy. When a regiment is by itself, the led horses follow it: if it form the rear guard, they proceed in front of it. If the enemy can attack both in front and rear, they are placed in the centre of the column.

Q. And if the regiment be brigaded?

A. The led horses are formed up with those of the other regiments of the brigade, and take up the situation assigned them by the general commanding.

Q. And in action?

A. The led horses are in rear of the lines, out of round shot range, and generally close to the nearest field hospitals.

Q. Are the led horses of a regiment under the orders of any one in particular?

A. Yes, they are under a non-commissioned officer, and sometimes even, in important circumstances, under an officer.

Q. What is the duty of this commander?

A. To keep them well together; to make them march together. If they halt, to select the place least exposed, and the most favourable for a halt. To reconnoitre the neighbourhood, and never to

go to such a distance from the regiment as to lose it, and not be able to rejoin it at the bivouac in the evening.

Q. Ought the led horses then to join every evening ?

A. Yes, except orders to the contrary be given, or imminent danger arise.

Q. Is the commandant relieved ?

A. His tour of duty is for twenty-four hours ; but he must not quit before he is relieved.

Sometimes, in order to retain in the ranks a useful non-commissioned officer, the led horses are entrusted to the care of a non-commissioned officer, who is either upwell or slightly wounded.

Nevertheless, this very important duty should not be entrusted to a man incapable of properly discharging it.

In order to command led horses, intelligence, mildness, and great firmness, are requisite.

Intelligence leads to the selection of a situation the most favorable for safety and convenience, and to the observation and judgment of the dispositions of the men under his orders.

Mildness destroys every pretext that evil disposed servants might seize upon to straggle, to march at their own pleasure, and sometimes even to desert.

Firmness keeps them close together, whether marching or halting.

If the commandant of the led horses, in action, loses sight of his regiment, he ought to ascertain from every man quitting the field, the movements which it was likely to have made ; and, according to the answers which he receives, to approach, or recede from, the place, where it is said to be.

It is necessary then that in the selection which he makes of his post, he ought always to endeavor to facilitate every inquiry that the regiment may make after its led horses. For this reason he should never take up a position, in which it will be impossible to find him in case of necessity.

He ought also to take care that the men leading the horses feed them, and never quit them. If they have to go for forage, he should exact that one half remain with the horses, and be answerable.

ble for them. He ought also occasionally to accompany the foraging party, if he have reason to fear that they plunder; get drunk, or jade their horses, which they take with them to bring back the forage.

When the horses are not eating, or he apprehends a surprise, he ought to make the men bridle them, and throw the reins over their arm.

He ought also to watch that they do not spoil the forage and the provisions, when they halt, and that they dispose themselves in such a manner as to be able to bring back to the bivouac any thing that may be required for the mounted horses, or for their masters.

He ought to make them drink, when he comes to brooks, or wells, and to have those horses dressed, which, being wounded, require special care.

On returning to the regiment, he ought to make his report to the officer commanding the corps.

Q. When a man is dismounted, whither ought he to betake himself with his arms and accoutrements?

A. To the led horses, which become the general rendezvous of men not doing duty.

Q. And when a horse is intended to be sent to the small dépôt?

A. He ought likewise to be taken to the led horses. There, if there should happen to be a man in good health and a horse in good condition, the former takes the latter and proceeds to join the regiment. In like manner, a horse not fit for active service is handed over to a wounded man, who forms one of the detachment proceeding to the petty dépôt.

Q. How can you find amongst the led horses, one fit for active service?

A. Because you send thither the horses, which have been captured, or those which have lost their riders, to mount the dismounted men who may be there.

Q. If you have brave officers, non-commissioned officers, or privates, who, being slightly wounded, cannot continue doing duty with the advance posts: but whom a few days of partial rest would restore to strength and activity?

A. You make them fall in with the led horses, and as soon as they are fit to rejoin the regiment, you summon them thither.

Q. If mounted troopers, and men perfectly capable of wielding their sabres, shulk away to the led horses ?

A. The commandant sends them back to their squadrons.

Q. Where do the sutlers of either sex march ?

A. Their intelligence, and their greed of gain, enable them easily to select the place best adapted for the sale of their goods. Nevertheless there are laws established by custom with reference to them, which we ought to be acquainted with.

The sutlers, who have carts, ought to proceed with the led horses.

Those, wh^t are on horseback, march closer to the regiment; and, so to speak, at an intermediate distance between it and the led horses.

A sutler has no business to sell any thing to any other corps, except when the regiment, to which he is attached, does not require any thing.

He ought not to quit his post of usefulness, except at those times when he proceeds to purchase the supplies which the regiment requires.

We ought to make it a point that a sutler should always have with him a small packet of lint and linen, to answer, in case of necessity, for the first dressings of the wounded. If the supply of the surgeons becomes exhausted, this reserve is inestimable.

We ought also to insist upon it that the sutler does not take undue advantage of the scarcity of articles of every description to sell his goods too dearly to the men of the regiment. His returns ought to be handsome in order to compensate him for his trouble, but they have no right to be exorbitant.

A good sutler is a valuable being for a regiment; consequently, it owes him protection and assistance.

Arrived in a camp, or in cantonment, the sutlers ought not only to be purveyors, but washermen.

A sutler, who pillages in an enemy's country, ought incessantly to be delivered up to justice.

Sometimes the troopers, required by the general officers for escorts, are withdrawn from this duty by the officers, or employés of the general staff, and forcibly transformed into servants of these gentry : every time that an officer, or non-commissioned officer, may find a man of his regiment leading horses which do not belong to the corps, he will ask the trooper, and, if he perceives that any abuse of the service has taken place, and that there are no written orders from the general, he will cause the horses to be released, and remand the trooper to the regiment.

CHAPTER XXXV

OF REAR GUARDS.

Q. What is a rear guard?

A. That portion of troops, which is detached to protect the rear of a body of men marching.

Q. To whom ought the command of a rear guard to be entrusted?

A. To that officer who inspires it with most confidence by the coolness of his judgment, and the firmness and boldness of his proceedings.

Q. Wherefore?

A. Because he will have to deal with an enemy whom our retreat will inspire with double audacity.

Q. What is the duty of that officer?

A. To retard by every possible means the approach of the enemy, and to perish to a man rather than allow him to penetrate the body which he is protecting.

At the Beresina, an officer of the rear guard, under a crushing shower of Russian grape, lost all his men. He had fruitlessly demanded reinforcements from General Ney. Not understanding his silence, he rushed up to him. "of the five hundred men that were under my command two hours ago," said he impetuously, "four hundred are killed." "The Trappists," replied Ney coolly, "never quit the edge of their graves; and when one of them says, 'brother, we must die,' the other replies, 'die we must.'" The officer returns to his post under a perfect hailstorm of balls. He was proceeding towards it repeating jocosely, 'brother, we must die,' when a terrible voice thundered out in reply, 'die you must!' It was that of Ney. The marshal remained a long time in the very front of the rear guard, which he encouraged by his heroic example! -

It was written in his destiny that he should perish by assassination.¹³

Q. When you are advancing, have you any need then of a rear guard?

A. Yes.

Q. What purpose does it serve?

A. To collect and force forward the laggards : to protect the column against an attack of the enemy, who may have turned it : to guard the important defiles, which we should dread to see fall into the power of the enemy : to reconnoitre the ambuscades, which may have escaped the notice of the column : to scour the flanks in the rear of the line of march ; and sometimes to connect a corps in advance with its troops of support.

Q. What ought a rear guard to do, when the body, to which it belongs, is attacked and forms line?

A. Unless it has orders to the contrary, it should join immediately, and take up its position in the line. If, however, it perceives a flank movement of the enemy which threatens the rear or one of the wings of the detachment, it ought rapidly proceed to show front to the enemy in that direction, sending notice to the commandant of the detachment, and immediately open its fire.

Q. If the enemy endeavored to seize a defile, which the detachment must necessarily repass, what would the rear guard do?

A. It would send intelligence of the same to the commandant of the detachment, and proceed with all expedition to defend the defile.

Q. Ought it to march at a very great distance from its column?

A. The distance, which it ought to maintain between the column and itself, depends, first of all, upon the orders which it has received ; if those orders are not precise in this particular, it ought to keep at a greater distance in an open country, at a smaller one, in one which affords cover, but always within sight, or, at least, to be able to maintain a prompt communication with the detachment, never losing its track, nor being separated from it by the enemy.

* Alludin, to the judicial murder of this distinguished soldier (Trans.)

Q. If, in despite of these precautions, a case of separation occur, what ought it to do ?

A. If the enemy is not very much superior in strength, break through his line, and join the detachment. If it conceive that it is impossible for this movement to succeed, it ought immediately to skirmish with the enemy, who is in possession of the road, distract his attention, and threaten him by its attacks.

Q. If the enemy detach superior forces against it ?

A. It ought to retire at the same pace at which the attack is made ; halt, if the enemy halt ; follow him, if he retraces his steps ; constantly harass him ; and, should the detachment make a gap in him, it should manoeuvre so as to second this movement, and join as speedily as possible.

Q. What is the duty of a rear guard in retrograde movements ?

A. To protect and support the retreat.

Q. How does the rear guard march in this case ?

A. At a distance always proportioned to the greater or less open nature of the country, which it is passing through ; but always at the same pace as the column, so as not to incur the risk of being separated from it ; feeling no anxiety about itself, and in such a manner also as to observe and, if possible, defeat any attacks with which the detachment may be threatened.

Q. What order of formation does it maintain ?

A. That which it conceives best adapted to prevent its being penetrated. If it is feebly pursued in the plains, it retains its line of skirmishers, which it pushes out, or brings in, according to the obstacles of the ground and the menacing appearance of the enemy ; but being always fully aware of the extent of the reality and power of these menaces, and being drawn up in such a manner as to be enabled to concentrate itself rapidly. If it be pressed vigorously upon a road, it only leaves behind a few skirmishers selected from amongst the bravest and best mounted ; makes the indifferently mounted men file off to the front, as they would only embarrass and retard its movements : then, supposing that it consists of a squadron, it posts its sections upon the road with an interval of a hundred yards between each. The sections retire in this manner ; they regulate their movements by each other, and all

front the enemy at the same time, taking care to have their right resting upon the ditch, so as to leave on their left a vacant space by which the skirmishers, when charged, can pass without being thrown into confusion. If the first section be driven back, it retires, in order to reform in the rear. The second remains in an imposing attitude, and briskly charges the enemy, whom he checks for a few instants : if it cannot hold its ground, it retires, and proceeds to reform in the rear of the first. The third charges in its turn ; then, afterwards in succession, the fourth, the first, and second.

Q. If the road is not sufficiently wide to admit of the front of a section, what should you do?

A. Form your sections in column of four deep.

Q. If the pursuing enemy bring artillery with him, what should we do ?

A. Post our troops as much as possible on the side of the road, of which we must nevertheless take great care not to abandon the possession ; make a more decided stand at every elbow of this road, and at every difference of level which affords cover from the guns, by interfering with a correct laying of them, and preventing them sweeping the road by a direct fire. Sometimes, threaten the guns, and lay ambuscades, if we conceive that there is any prospect of success.

Q. If, whilst we are retreating, we fall in with a wood, what should we do ?

A. Make a bold demonstration of holding it, in order to perplex the enemy as to the number of troops that may be within it. If the enemy halt, it should march towards him, and profit as long as it possibly can by his hesitation, always sending notice to the detachment of the halt which it has made, informing it of the dispositions of the enemy, and not exposing itself to be cut off. If the detachment deem it inexpedient to halt, it will intimate as much to the rear guard, which will shape its movements accordingly. If it alter its route, it leaves a non-commissioned officer at the place where the change has occurred, in order to direct the route of the rear guard.

Q. If it be a village which presents itself?

A. We act in the same manner, and profit, by the time that we are halting, to barricade it with beams, and with carts, the wheels of which we take off, &c. In order to accomplish this, we masque our movements by a single section, which holds the road; the others are directed to form behind the barricade, in which only a narrow aperture is left to admit of the successive retreat, one by one, of the troopers of the extreme rear guard, as soon as it is threatened with an attack. If the charge take place, we receive it with a fire of carbines or pistols.

Q. What should be your principal care in throwing up barricades?

A. To place them so that they cannot be readily turned; for then they would be more dangerous than useful to us.

Q. If it be a bridge that we come to?

A. We pass it rapidly, and hold it from the opposite side. If it be a wooden bridge that can easily be destroyed, we open a skirmishing fire to protect those of our men who are engaged in the work of destruction.

Q. How do you destroy a wooden bridge?

A. By tearing up the beams which constitute its platform, and which we must be careful to throw upon the bank that we occupy, or by burning it. In order to set fire to it, we place straw and faggots beneath it, and, if possible, pour tar over it. This is always slow work.

Q. If it be a ford that it would be useful to destroy; how would you set about it?

A. If it be near a village, we would endeavor to collect all the harrows in the place, and capsize them in the ford, with their teeth uppermost. We would strew broken bottles along the bottom of the ford, or fell trees across the river, their branches pointing towards the enemy, &c. If we cannot destroy the ford, we barricade it like a defile.

If the enemy would force the ford, we make a feint of retiring, in order to let him get himself entangled in it, and, when the head of his column has passed, we charge him vigorously and overthrow him in the river.

Q. If the river be not fordable ?

A. We pass it, in the manner laid down in the chapter on detachments.

Q. If we cross it in a ferry boat, or in boats ?

A. We do, as is mentioned in the same chapter; only we scuttle the boats, after having used them.

An officer of a rear guard ought not to have under his orders any horses and men but what are well up to their work ; because his march ought not to be retarded by isolated causes.

If, then, he finds that he has with him horses not strong enough for the service, he ought to get rid of them as speedily as possible, sending them back to the detachment.

Q. What are the general points of attention of a commandant of the rear guard ?

A. To check by every means which his intelligence may suggest to him, the march of the enemy. To hinder him from estimating the strength and composition of our columns, as well as the purpose which directs their progress. To restrain the pace of his horses, so as not to blow them, and to bring back all his people with him. Not to allow himself to be cut off from the body that he is protecting, and to be in constant communication with it. To afford proper support to such of his men as may have dismounted for the performance of any duty, and never to allow himself to be forced in a wedged mass upon a defile, which he cannot pass without loss.

Q. Do the rear guards march by night as well as by day ?

A. At night they close up to the column, especially if the night be dark, the enemy near, and the inhabitants hostile.

Q. And if they be afraid of losing the track of the column ?

A. They throw out intermediate troopers, who serve as landmarks for the road.

Q. The body, which is protected by the rear guard, having halted to bivouac, what does the rear guard do ?

A. It takes up its position on the ground where it is ; but the detachment causes it to be relieved without delay, because it is in

general too much fatigued not to stand in need of complete repose. It then enters the bivouac, and disperses itself among the columns.

The duties of a rear guard are summed up in these three words, which ought to be its motto—Vigilance, unity, and intrepidity.

The dangers which a rear guard incurs are always in a direct ratio more or less to the greater or less order which is preserved in the march of the columns which it protects.

CHAPTER XXXV.

OF CANTONMENTS.

Q. What is a cantonment?

A. An encampment of a body of troops on the eve of a war, during an armistice, or even during war time.

In the two first cases, the light cavalry is cantoned at the advance posts of the line of operations.

In the other, to the rear of the line of operations. This is what occurred in 1807 with the cavalry of Prince Murat, when it formed one body below Elbing and in the island of La Nogate, whilst Ney's corps covered it, continually fighting upon La Passarge.

Q. How is a cantonment located?

A. In rear of an obstacle that the enemy cannot readily clear.

Q. How is a cantonment laid out?

A. By collecting the greatest possible quantity of cavalry in the same spot; but nevertheless in such a manner that the horses have sufficient forage, and are under cover;* for the object of cantonments is always either to place ourselves in, or maintain ourselves in, a readiness for sharp work.

Q. How is it protected?

A. The proximity of the enemy, his threatening attitude, the known resolution and skill of his leaders, the greater or less defensive security of our position, point out the prudential measures which we should adopt, the necessity of having advance posts, and placing them in such a manner, as to diminish or increase their strength; but the best guardians of a cantonment are numerous and trusty spies, and a critical knowledge of political events. When any thing is to be apprehended, a cantonment conforms to

* This last is not requisite in eastern climates. (Trans.)

that which is laid down in the chapters ; *bivouacs, advance guards, main guards, reconnoitring parties, &c.*

In the contrary event, it contents itself with placing the guards, that are absolutely necessary, on foot and behind the barricades ; with connecting all parts together by a brisk communication ; and with pointing out a general rendezvous for its different detachments. The officers commanding a cantonment ought to exercise a vigilant surveillance, because the men, accustomed to liberty, to pillage, to the unceremoniousness of war, are difficult to be brought back to order and useful economy as regards either themselves or the inhabitants.

It is necessary that duty be carried on regularly, and that unexpected and frequent roll calls compel the men to be present.

It is necessary also that the men live with their horses ; that their portmanteaus be always stowed, and the accoutrements and arms be within reach of the troopers.

' Let activity be maintained, and let false and combined alarms, from time to time, rouse up the sleepers.

If the cantonments are entered upon during the period of an armistice, or after the termination of hostilities, it is requisite that each detached officer should thoroughly comprehend and collect together the resources of his village, so that he may be able to calculate the length of time that these resources are likely to last him. When he perceives that they will shortly be exhausted, he must not wait to give his superiors notice of it. In an enemy's country, every officer of a cantonment ought, as soon as he arrives, to demand from the authorities of the place the names of the artisans, who may be useful to him ; then collect them in a workshop, place an orderly corporal over them, and compel them to work in the repairs of the arms, equipments, and clothing. If we are incapable of paying these artisans in money, we endeavor to give them a fair portion of the distribution of rations, and exempt their houses from having men billeted on them, &c.

Every commandant of a squadron, who, after even a lengthened campaign, quits a cantonment in which he has been three weeks, without having every thing thoroughly repaired, is a good for nothing captain.

Q. What is the best method of attacking a cantonment?

A. By surprising it. For this purpose, it is necessary:

1st. That the orders for the preparations for the attack be not given till the very moment for putting the foot into the stirrup arrives, in order that the spies may have no time to give notice to the enemy.

2nd. That vedettes should be placed in the direction of the enemy, so as to arrest every spy, who may escape.

3rd. That the men saddle their horses with the utmost secrecy and expedition.

. 4th. That the detachment, when formed up, should take advantage of the night to surprise the enemy's cantonment.

5th. That the attack be impetuous, and conducted in the manner laid down in the chapter upon surprise.

Q. If it be ourselves that are suddenly attacked?

A. Don't run to your horses, but fire through the windows of your quarters, until you have an opportunity of proceeding to the alarm post.

CHAPTER XXXVI.

OF OUR LIGHT CAVALRY IN ITS RELATION TO INFANTRY.

If, in a reconnoissance of either an advance, or a rear, guard, some infantry should, for the time being, be placed under the orders of a cavalry officer, this officer ought to take the greatest care of it, and look upon it as a duty to preserve it more than his own cavalry. *

When bivouacked, let his foragers share in a brotherly manner with the foot soldiers.

Under fire, let them support them, and never abandon them. If the country become open, let the troopers form the first line. If it become close, let the infantry march nearest to the enemy, but let the cavalry look out upon one of its flanks to prevent its being cut off, and in its rear that, should it be driven back, it may find itself promptly and vigorously supported.

If, with the rear guard, this mixed body finds itself attacked by very superior forces, which oblige it, as a prudential course, to quit the direct road, let it select one less exposed, and upon which the defence has a greater prospect of success, let the cavalry consult before every thing else the convenience of the infantry, and regulate its pace by the march and physical powers of the latter.

Let the commandant direct the march of his detachment on the side where he can fall in with intersected ground, copses, vineyards, mountains.

If a foot soldier be wounded, let a trooper give up his horse to him, and arm himself with his musquet, until a horse or a cart of the country can be met with to convey the wounded man.*

When the time for halting arrives, let the bivouac be selected in

* This maxim is unnecessary in India, where abundance of sick carriage always accompanies the troops when marching. (Trans.)

such a manner as that the infantry may be covered and protected from a surprise by the enemy's cavalry.

In this bivouac, there should be no more vedettes, but abundance of infantry sentries, and merely constant patroles of cavalry.

At the advance guard, let the infantry be masqued, and never discover itself till the proper moment arrives. This well managed display of it will produce the greatest effect upon the enemy, especially if he oppose nothing but cavalry to us.

An excellent method of bringing the infantry into play for the first time, is to place it in ambuscade, and then inveigle the enemy's cavalry in a body upon the ambuscade: a house by the way side, a hedge, a ravine, a quarry, a copsewood in a plain, a garden wall at the entrance of a village, are excellent screens to masque this ambuscade, especially if the infantry, entering thoroughly into the spirit of its object, keeps silence, lowers its arms and its shakos, crouches, lies down; in short uses every means to conceal its vicinity until the proper time.

Let our cavalry then not hesitate to pass by the ambuscade; but let it form rapidly, sword in hand to charge vigorously and home, after having discharged their fire arms at close quarters; if it profit at the proper moment by the surprise of the enemy, it will obtain great advantages. If it does not cut him to pieces in this affair, it will at all events teach him to be more wary: the moral power will be on its side, and it is to be presumed that he will not venture upon any more bold experiments with the same body.

If you manœuvre in concert with your infantry, take especial care to unmasque its fire in such a manner as not to crowd or paralyse it.

Supposing that the detachment is composed of a battalion and four squadrons, and that you are compelled to cross a plain, whilst retreating, put the infantry in the centre in echelon of half battalions.

On the right and left post a squadron in column of sections, and keep the two other squadrons together in the rear of the centre and at a distance of a hundred and fifty paces.

The infantry will have the whole effect of its fire. If it be threatened, its two lines will rapidly form echelon of squares, your squadrons on the wings will be, so to speak, the arms of a body acting in unison like a man. The central position of the reserve squadrons will allow them to proceed in a few seconds to the points that are threatened.

As soon as the formation of the ground shall present eligible posts, the square, which is furthest from the enemy, will establish themselves there, will occupy their line, and extend its fire, to protect the rest of the detachment, which will pass by this position, and form echelon to the rear in its turn, leaving the second half battalion to form the rear guard. If the squadrons on the wings have suffered, they will be relieved by those of the centre, whose position they will take up.

If we should not halt, we will remain but a short time in this position, and the retreat will be executed in good order.

If the road be bordered on one side by vineyards, or woods, hedges, ditches, &c., and on the other, by a plain, the cavalry will conduct its retreat in echelon along the road or plain ; and the infantry will retire in like manner by the side protected by natural obstacles.

If the enemy with very superior forces presses our retreat vigorously, when night falls, the infantry will remain bivouacked for only the very few hours that are absolutely requisite to rest it ; it will then file off first, whilst our cavalry, one half of whose horses remain bridled, will keep up the fires in order to deceive the enemy and will only retire slowly an hour before sunrise.

If the confidence and boldness, which we have observed in the enemy, should induce us to apprehend that he will take advantage of the night to form ambuscades in our rear upon the road that we purpose taking the next morning, we will forestall him in this design by silently quitting our bivouac, as soon as the fires are lighted, either for the purpose of taking up a position considerably to the rear and beyond the reach of danger, or of quitting the road, and proceeding to the right or left in a direction that the enemy could not possibly have anticipated that we would have chosen.

CHAPTER XXXVII

OF FORTIFICATION:

An officer of light troops ought to have some idea of fortification. In fact, if the commandant of an advance guard surprise a fortified town ; if, whilst reconnoitring, it approaches works ; it is necessary that he should know the importance of that which he reconnoitres, or that which he surprises ; it is necessary that he should be able to render a faithful account in the reports which he makes.

If this same officer, charging the enemy, finds himself, as we did at Wagram, pulled up dead by *trous-de-loups*, small pickets, and *chevaux de frise*, it is requisite that he should know the importance of these works, and that he should alter his original dispositions of attack, in order to turn that which he cannot take like a bull by the horns.

If, in an exposed situation, and forced to remain there ; or with a rear guard, and hotly pressed, he may find, in such knowledge of fortification as he possesses, some means of strengthening and defending himself : this knowledge will not be thrown away.

Furthermore, the lines of fortification, which are exceedingly rational, possess a strong analogy to those of the dispositions of troops upon a field of battle : the knowledge of the one will powerfully assist that of the other, and will explain with mathemati-

cal precision the *wherefore* of movements, and of positions taken up, which it would be difficult to comprehend at the first glance without a smattering of fortification.

There are two descriptions of fortification: the one called *permanent*, constructed with all possible solidity, serves to surround and defend places.

The other called *temporary*, or field, thrown up in haste, composed of earth, or materials that are at hand, serves to cover the different positions of an army, a camp, the head of a bridge, a defile, a dike, &c.

The design of these two kinds of fortification is further pointed out sufficiently clear by their denomination.

The attack and defence of the first are subjected to particular and special rules, which are not applicable to field warfare.

The outline of these two kinds of fortification is the same as to the form, and only differs in the relief and solidity: thus, what we shall say of field works, with which alone we shall occupy ourselves, applies equally to permanent works.

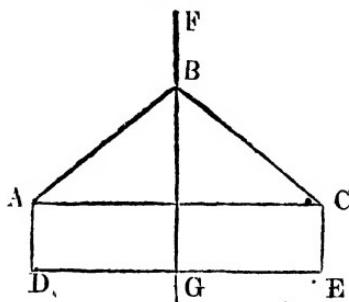
The principal field works are: the *redan*; the *lunette*; *star forts*; *continued lines*; *lines with redans*; *with bastion fronts*; and *lines with intervals*.

Then follow accessory defences, such as *palisades*; *frises*; *abattis*; *stockades*; *trous-de-loups*; *small pickets*; *loop holes*; *caltrops*; *fou-gasses*. Their name of accessory points out that they are employed along with the principal works: however, they are sometimes used by themselves alone.

Before proceeding further, we will explain some terms, which are constantly used in fortification.

The term, *flanked angle*, is applied to a salient angle, the vertex

of which is protected by the fire which crosses in advance of its capital, A B C is a flanked angle.*



The *capitul* is the line F G, which divides into two equal parts the flanked angle of a work.

The *faces* are the sides A B, B C, of the flanked angle.

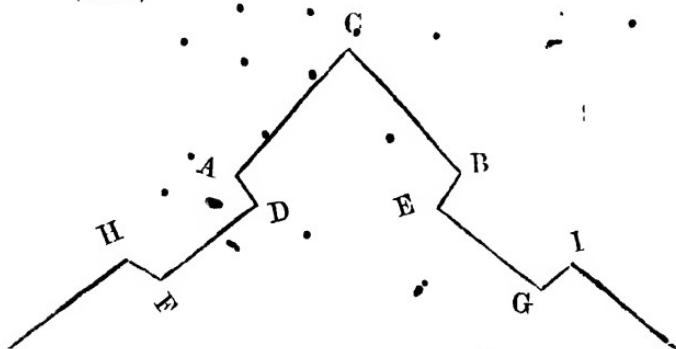
The flanks A D. C E, are to the rear of the faces, to which they belong, and with which they form an angle.

The *gorge* D E is the opening which affords admission to the work.

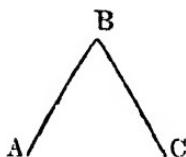
Q. What is a Redan?

A. It is a work, composed of two faces, forming an angle

* The author here makes an important error. As the figure stands, A B C is not a flanked angle, the flanking lines not having been drawn. We supply the omission below. in this figure, A B C is a flanked angle, because the fire from the two flanks F H, and G I, of the other two bastions cross each other in front of its vertex C. (Trans.)

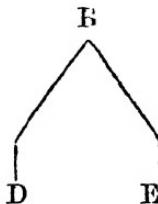


A B C, open at the gorge: it serves to cover main guards, and advanced posts. Its profile is weak.



Q. *What is a Lunette?*

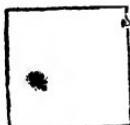
A. It is a work composed of two faces and two flanks, and open at the gorge: its dimensions and profile are stronger than those of a *redan*.



The *lunette*, serves to cover the head of a bridge, or any other defile, a dyke, &c. In consequence of its being open at the gorge, the *lunette* should always be supported in the rear, either by troops or by other works.

Q. *What is a redoubt?*

A. "It is a work entirely closed, of which the form and the profile vary according to circumstances. The redoubt is generally square.



Q. *What is a star fort?*

A. It is a species of redoubt, which takes the form of a star. It is constructed with four, five, six or eight points: those of the greatest number of sides are generally capable of a longer defence.

They are roomier, and can contain a greater number of defenders.

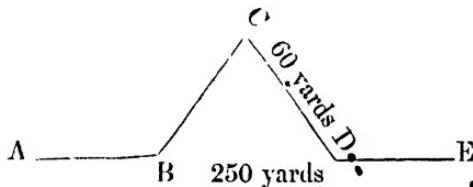


Q. What are continued lines?

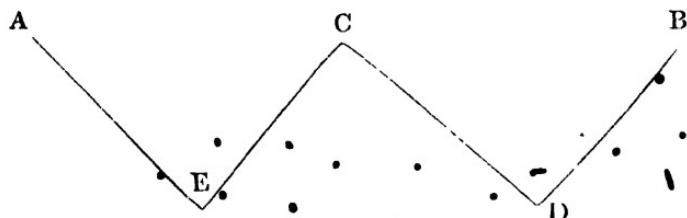
A. Lines formed of several contiguous fronts, having their exterior front from 200 to 250 yards long.

Q. What are lines with redans?

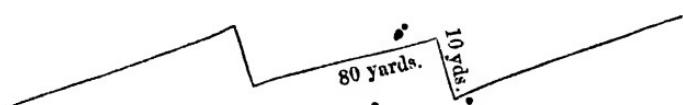
A. Those which present a *redan* thrown up in the middle of the front or the side.



The lines, A E G, C D B are *en tenaille* when they present a series of right angles.



Lines are *en crêmaillère*, when the confined nature of the ground does not allow of salient angles being thrown out in front, as upon a dyke, the bank of a river; the long sides have not more than 80 yards, and the short ones have not less than 10.



Q. What are lines with bastioned fronts?

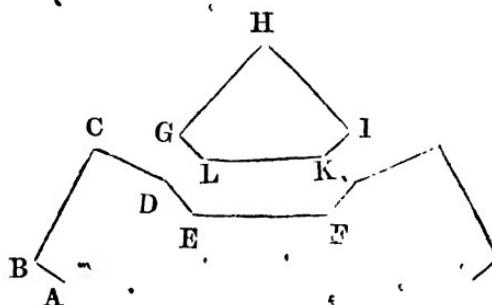
A. They are the lines A B C D E which show bastions, or salient parts, whose object is to obtain a better view of the country, and to keep the enemy's attacks at a distance. A C are the faces, and C D the flanks of the gorge. (So says De Brack, but



B C and C D are the faces, and A B and D E the flanks of the gorge.*)

The parts E F and A I, which connect two bastions, are termed the curtains.

When we have time, and we wish to render the defence more complete, a half moon G H I K L is constructed before the curtain E F. The flanked angle H ought to be 150 yards from the faces of the bastions.

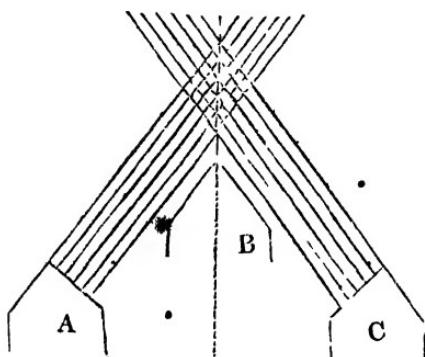


Q. What are lines with intervals?

A. They are those which have intervals left between them adapted for the movements of troops. They are composed of detached works, which we have described further back, and which reciprocally flank each other.

* The author has evidently been nodding here: the text contains an erroneous and absurd statement. (Trans.)

We can employ a system of lunettes, A, B, C, or of redoubts, or any other detached works.



General Rogniat proposes detached bastions, connected by batteries forming curtains, with an opening at the extremity of the flanks.

Lines with intervals are of more use than continued lines, because they are adapted to attack as well as to defence. It is of consequence, in a reconnaissance to specify the description of lines, in order to proportion the means of attack thereto.

ACCESSORY DEFENCES.

Q. What are palisades?

A. They are triangular prisms of wood sharpened at one end, from 2 yards 3 inches to 3 yards long; they are placed in the bottom of ditches, at the gorge of works, in covered ways; they are planted perpendicularly with the points uppermost. They are a capital defence, when not seen by artillery.

Q. What are faires?

A. They are the same thing as palisades, but placed differently. They are generally driven into the parapets, sloping outwards towards the bottom of the ditch. They must be kept out of sight of the artillery.

Q. What are abattis?

A. They are felled trees, on which the main branches only are left, which are sharpened at the extremity. They are placed upon the *glacis*, in front of the works, or to stop up a gap, or obstruct a passage. They are interwoven together, the ends of the branches pointing towards the enemy, and they are secured with piequets.

Q. What are stockades?

A. They are works formed of trunks of trees connected together, behind which the earth is thrown up to form a *banquette*, and it is usual to make a loop hole for musquetry at a yard apart from each other.

Q. What are trous-de-loups?

A. They are conical holes, about a yard in diameter, and $1\frac{2}{3}$ yard deep, at the bottom of which is a stake, and arranged quincunx-wise in three rows, in front of the works.

Q. What are chevaux de frise?

~~A.~~ They are balks with four to six faces, having passing through them wooden lances pointed with iron, and sticking out about $1\frac{2}{3}$ of a yard, they are placed at the gorge of works, or in the openings of lines.

Q. What are small picket?

A. They are pickets irregularly placed, a foot distant from each other, sloping towards the enemy, and sticking out from $\frac{2}{3}$ of a yard to a yard.

Q. What are caltrops?

~~A.~~ They are iron machines with four points, $3\frac{1}{2}$ inches long, placed in such a manner that one of them shall always be sticking up.

Q. What are fougasses?

A. They are small mines filled with gunpowder, and buried at the depth of 3 or 4 yards. They are covered with earth to the level of the ground, and they are sprung, when the enemy arrives over them.

Shells are used to produce the same effect.

Q. What means do you employ to destroy gates, bulk heads, barriers, &c. ?

A. You put from $22\frac{1}{2}$ to 45 lbs. of gunpowder in a bag against the obstacle, and heap from eight to 10 bags of earth against them. They are fired. The obstacle generally gives way. When it is very strong, you employ as much as 67 lbs. of gunpowder.

CHAPTER XXXIX.

OF REMOUNTS.

OF THE DISEASES OF HORSES ON FIELD SERVICE, AND OF THEIR TREATMENT IN THE ABSENCE OF A VETERINARY SURGEON.

Q. It may happen that in a campaign you may be detailed for the selection of a remount. What are the most essential qualities for a horse for the light cavalry?

A. A robust state of health, and strength.

Q. Is not speed also requisite?

*A. Undoubtedly ; but then a powerful horse of light cavalry figure, is almost always swift : speed, in general, being nothing more than the result of a judicious and equable expenditure of its powers, we must not commit the fault of sacrificing other qualities to that which it is customary to call *speed* and *gracefulness*. To require too many qualities in a remount horse, bought at a low rate, is to seek for impossibilities, and to incur the risk of obtaining remounts, dashing in appearance, but which exhibit marked defects when you come to use them.*

Q. How do you classify the breeds adapted for light cavalry service ?

A. The Russian, the Polish, the Hungarian, the small Danish kind, those of Litoche, the French, the Ardennes, and that called the German.

Q. I thought that the German horses were superior to the French ?

A. That is a mistake : they are perhaps of a lighter build, and more easily broken in ; but they have less limb, are not so straight on their legs, and have less bottom.

Q. Are there breeds in France adapted for light cavalry?

A. There are few particularly so; but this arises from the neglect with which government to the present hour has treated the subject of breeding: nevertheless, there are different breeds, amongst which I would distinguish the Auvergne, the Morvan-dille, the Niverne, the Bréton, and the Béarn.

Q. And the Normandy?

A. It is too expensive for light cavalry.

Q. What are the points that you would insist upon for a French light cavalry horse?

A. Most especially, a short barrel, good chest, strong limbs, and sound hoofs.

Q. If a horse have rather small feet, would you reject him?

A. Not if they are in proportion with his limbs. There are two essential conditions in active warfare; these are, to be able to march, and to proceed at a greater speed. The marching is much the most frequent, and marches try horses more, and destroy more horses than the enemy's fire. In order that cavalry may be useful on the field of battle, it is necessary that it should reach the scene of action. A weak and tucked up horse, tried by the constant weight which it carries, and a deficient and indifferent diet, is less certain to reach it than a strong and powerful horse; or, if it do arrive, it is exhausted at the very moment when all its strength is required. The pace of a regiment in action is always regulated by that of the slowest horses; thus, if a horse can gallop tolerably well, nothing more is required of it. A horse, such as I have described, carries, without suffering thereby, his rider, his trappings, his equipments, his provender; he is not exhausted either by the march, the cold, or the heat: he bivouacs in the midst of rain or snow, without losing his appetite; his foot does not cast the shoe, and he is never found wanting for the service required of him: moreover, his paces will become rapid, when his rider has paid proper attention to him.

Q. Mention in detail the diseases which may affect the horse, and

the simple remedies that may cure or check them, if you have not a veterinary surgeon in the field.

THE HORSE IN HEALTH.

The horse in health is that, all of whose animal functions proceed regularly, who has a lively look, the coat sleek, the flanks heaving regularly, and who eats and drinks properly.

THE HORSE WHEN SICK.

The sick horse is one, of which one of its functions is disordered ; the eye is no longer lively, he hangs his head, does not eat as he is wont ; and, if he be exercised in any way, he displays no longer the same vigor, whilst his respiration becomes quicker. These first symptoms should not be neglected : they are often the precursors of serious diseases.

Means to be used.

As soon as it is perceived that a horse is not so lively as usual, and that his appetite has fallen off, we must immediately do away with every description of heating food, such as oats and hay ; put him on straw, and a mash composed of a handful of bran or flour, mixed in a bucket of water ; and give him gentle exercise. A few days of this regimen will often make the symptoms disappear ; but sometimes it happens that this state of disease increases, and the horse refuses food and water : he is more dull, he hangs his head, his coat becomes staring, his flanks heave, his eyes are swollen and watery, and his mouth hot.

Treatment.

If the mucous membrane of the eye be inflamed, and the pulse full, he must be bled freely from the jugular vein ; and, if a good effect follow, it is repeated the following morning : then give the horse a mash with saltpetre, made of a drachm of saltpetre and a handful of bran or flour in a bucket of water : a very small quantity of straw is given him. A few emollient injections, made of a handful of bran in two pints of water, produce a good effect. These

means are occasionally sufficient to arrest the progress of the disease.

THE LAMPAS.

Is an inflammation of the mucous membrane of the mouth ; it is generally the consequence of inflammation of the stomach. A few days of regimen are sufficient to check the progress of an affection which is not dangerous further than that it prevents a horse from eating. If the inflammation continue, lightly scarify the palate with the point of a bistouri, between the third and fourth furrows, counting from the incisors : were we to bleed lower down, we should run the risk of cutting the palatinal artery, and of bringing on a dangerous hemorrhage : after the blood has flowed, we apply a mastigadour.* It is made by pounding a clove with pepper and salt, and folding it up in a rag : soak the whole in vinegar, and fasten it to the snaffle bit ; leave it for an hour morning and evening in the horse's mouth, and select the hour for stable duties for that purpose.

ANGINA PECTORIS.

Is an inflammation of the mucous membrane of the larynx and pharynx (the throat) : this disorder is very dangerous, and often terminates seriously. It is ascertained by the dulness of the horse, and a thick and painful cough ; he can no longer swallow ; there is a running of saliva from the mouth, and the throat is much contracted.

Treatment.

The first means to be employed is to keep the horse warm ; to give him lukewarm drinks ; to bleed him copiously, and subject him to a vapor bath thus composed : one pound of mallow leaves boiled in four pints of water : make him inhale the vapor of it, by placing the vessel under the horse's head, which must have something thrown over it, to keep the steam in : make him also take some gargles of honey and barley, which are made of a decoction of two handfuls of barley to four pints of water, adding thereto

*A mouthing bit for producing mastication and a flow of saliva. (Trans.)

half a glass of vinegar and a pound of honey. This gargle must be injected, invariably lukewarm, with a syringe,

If the disease continue, a seton must be inserted, by making an incision in the skin of the chest, which you pinch with the left hand, pulling it towards you so that it may double under your fingers; pierce it with a sharp blade, taking care not to injure the muscles; pass through the two apertures a skein of thread, smeared with basilicum ointment; tie the two ends of the skein together: cleanse the seton daily, and put fresh ointment on it every other day.

STRANGLES

Attacks young horses. It presents very nearly the same characteristics as *angina pectoris*, except that the glands of the lower jaw, below the grinders, are swollen; a whitish matter, which does not adhere, is ejected from the nostrils; the eyes are watery; and the horse coughs with difficulty.

Treatment.

His oats and hay must be discontinued; the horse must be put upon a lukewarm mash; then give him an electuary, composed of four ounces of liquorice powder, or marshmallows, to one pound of honey, which is enough for one. (This medicine must be administered by means of a small wooden porringer, which will convey it down the throat.) Keep the horse warm, and if the disease increases, make use of a seton, and vapor baths.

GLANDERS

Is a fatal disease. When it is well established, it presents very nearly the same features as strangles, and has often been mistaken for that complaint. It only attacks horses come to their full growth. It is known by the tissue from one nostril of a greenish matter, which adheres to it, with a swelling of the gland on the same side. The horse is not inconvenienced by it, and continues to feed well.

Treatment.

The first thing to be done, when a horse has this discharge, is to separate him from the rest; to put him upon mashes of bran

and water, and straw. Occasionally copious bleeding, vapor baths, and a seton in the chest, are capable of checking this disease.*

FARCY

Is a contagious disease which displays itself by knots formed on the cellular tissue, and which generally follow the course of the veins. The first thing to be done is to separate the horse, and put him upon diet.

The cure is very tedious.

THE MANGE

Is a cutaneous disorder, which shows itself by little pointed buds, which occasion an intolerable itching, and compel the horse to rub himself. It is always the consequence of want of cleanliness.

Treatment.

This complaint being highly contagious, the horse must be separated, and put upon diet: the buds should be washed with an emollient decoction, and afterwards with a ley, or a solution of sulphur of potash, or of tobacco: administer gentle purgatives, and have the horse well groomed, taking care not to break the skin of the buds.

RINGWORM.

A cutaneous inflammation, usually chronic, characterized by small red vesicular buds, united in greater or less patches, generally rounded, attended with more or less itching, upon which is formed a kind of scab, or a yellowish ichorous secretion.

Treatment.

It is prudent to separate a horse affected with ringworm; put him upon diet; make mercurial ointment, of one ounce of mercury mixed with four ounces of lard, which will be sufficient for rubbing on the horse for fifteen days, and purge him.

* There are no well authenticated instances on record of this disease ever having been cured. (Trans.)

LE ROUVIEUX*

Is an itching, which attacks the mane, and is caused by want of cleanliness.

Treatment.

The part must be kept quite clean, and washed with a ley. This care is sufficient to arrest the disease.

GASTRITIS (INFLAMMATION OF THE STOMACH).

This disease is characterized by a general uneasiness: the horse no longer eats, his coat stares, he becomes dull, his mouth is hot, the mucous membrane of the eye assumes a yellowish hue, which is an essential characteristic of this disorder; sometimes, it is combined with inflammation of the intestine, and then takes the name of *gastro-enteritis*. It is a very tedious and dangerous disorder, the consequence of which can only be guarded against by putting the horse under the sharpest discipline.

Treatment.

Give him nothing but bran and water, and administer gentle and frequent bleeding: give emollient honied decoctions.

COLIC

Is very frequent with troop horses, and is often caused by over-feeding, or by cold water taken into an empty stomach. It is discovered by a general uneasiness; the horse ceases to eat, lies down, gets up again; looks towards his flanks, and puts himself in the position for straining.

Treatment.

The first thing to be done is to ascertain the causes which have produced it. If it be indigestion, food must be discontinued; the horse must be walked about; and, when he returns, be well rubbed

* In English farriery no distinction is made between mange in the mane, and mange in any other part of the body. Consequently there is no distinct term for it. (Trans.)

about the belly : then administer some injections of bran water, and afterwards an ethereated camomile decoction, made with twenty drops of ether, which will serve as a drink. If it be produced by cold water taken into the stomach ; we must reproduce perspiration, and this we effect by hand grooming, and drinks of hot wine, composed of a bottle of wine with four ounces of honey for a draught ; sometimes these colics make very rapid progress ; the horse is in great pain, and they become inflammatory : this stage of the malady is shown by the irregular movements of the animal, and a yellow tinge upon the membrane which lines the interior of the eyelids, and surrounds the eye : we must then bleed freely without loss of time, and administer drinks, as well as emollient clysters : decoctions of bran take the place of those of mallows or lintseed, in those cases wherein we have not the means at hand of making up these last.

DRY GRIPES.

These are caused by an accumulation of food, which forms a kind of hard ball, and closes the intestinal canal, not allowing the dung to be passed : this colic is always very dangerous and lasts sometimes for eight days ;* the horse, which is affected thereby, becomes heavy, refuses to eat, looks towards his flanks, rises, lies down again, but does not strike himself as in the other colics : his flanks are tucked up, and he has no evacuations, despite of the injections which are given him.

Treatment.

The horse must be deprived of all food : he must be walked for whole hours together.† On returning to his stable, he should be rubbed strongly under the belly, and clysters given : if these means are insufficient to make him dung, he should have drinks of lintseed with olive oil given him, prepared with two ounces of lint-

* In tropical climates, if not cured, the disease generally runs its course in twenty-four, or forty-eight hours. (Trans.)

† The first thing to be done, is to pour a bottle of ghee down the horse's throat, as hot as he can bear it, and then freely back rake him as far as the hand can be introduced. Shaking up fresh straw under his belly until he stales, is also highly useful. (Trans.)

seed, and a wine glass of oil in three pints of water : the oil is not added until the decoction is ready ; he should drink it lukewarm. If the gripes continue, repeat the bleeding, and administer an ounce of powdered aloes in half a bottle of wine : these means almost invariably succeed.

CYSTIC CHOLICS.

These are occasioned by inflammation of the bladder, always very dangerous, and more common to the horse than to cattle. They are known by the fruitless efforts which the horse makes to stale.

Treatment.

Deprive the horse of all food ; have him well rubbed under the belly ; administer bran water clysters, and emollient draughts with saltpetre, prepared with a drachm of nitre in two pints of emollient decoction ; bleed him ; if the colic continue, and the horse do not stale, the hand must be passed up the rectum, and the bladder gently compressed from front to rear : this method will cause the urine to be passed, but it requires great precautions ; the nails must be cut, and the arm oiled.

PERITONITIS

Is inflammation of the peritoneum (the membrane which lines the abdomen, and wraps up the intestines.) It presents very nearly the same features as colics. It is generally occasioned by a checked perspiration, or by horses drinking cold water when they are much heated : the horse shortly afterwards becomes dull, lies down, rises again, turns his head towards his flanks, and the mucous membrane of the eye is greatly inflamed.

Treatment.

It is of consequence to ascertain the cause ; if it be checked perspiration, we restore it by walking the horse about, and rubbing his belly : honied emollient draughts, (of lintseed or mallows,) and injections of bran water, are administered ; the horse is copi-

ously bled, and the bleeding is repeated, if it is followed by good effects ; we may, without any apprehension, abstract twelve pounds of blood at the first bleeding.

PLEURISY

Is inflammation of the pleura, (the membrane which lines the chest and encloses the lungs) : it is very often occasioned by checked perspiration ; it is known by the difficulty with which the horse breathes, his respiration being very painful ; he coughs painfully and with difficulty ; hangs his head ; his pulse is wiry, and he does not eat.

Treatment.

In order to remove the exciting cause, the horse must be put into a very warm stable ; he must have a lukewarm thin bran mash given him to drink ; be rubbed under the belly ; be deprived of all food ; have emollient honied drinks given him, always warm, and bran clysters : if these means fail, bleed copiously, which may be repeated two or three times : make him take honey with liquorice powder ; put a seton into his chest, and give him vapor baths.

PNEUMONIA

Is inflammation of the pleura, and the pulmonary tissue : it is caused by the great quantity of blood which flows to the lungs, in consequence of checked perspiration, and often by atmospheric influences : it is known by the great difficulty which the horse experiences in breathing ; he coughs with difficulty ; his flanks heave ; his coat stares ; he hangs his head ; and refuses to eat.

Treatment.

Keep the horse warm, cover him up well ; and give him nothing but thin mashes with honey, emollient draughts and clysters. If the symptoms increase, bleed copiously, give honey with liquorice powder, bran decoctions and injections ; pass a seton into the chest. Often, by employing these first means in time, we overcome the disease.

TETANUS, OR LOCK JAW,

Is a nervous affection characterised by the contraction of the extensor muscles ; it is almost invariably fatal, and the horse that is seized with it is as stiff as a poker. When tetanus affects the muscles of the jaws, it is termed trismus ; it is the most dangerous, because the horses cannot unlock their teeth, and it is impossible to make them drink any thing : thus they die of hunger.

Treatment.

The treatment consists in rapidly seizing the first symptoms of the disorder, and baffling it by copious bleedings, and emollient lotions over the whole body ; in giving every morning fasting forty grains of opium, made into pills, which are introduced into the horse's mouth at the end of a switch. This violent remedy repeatedly fails.

THE TRUE VERTIGO

Is a nervous affection produced by an inflammation of the brain and its coverings.

The horse, which is affected by it, becomes dull, refuses food, hangs his head, his eyes are sunk, and he appears deprived of all feeling. Shortly after the appearance of these symptoms, the horse is distressed, hurls himself against the manger, or rack, and even dashes his head against the wall.

Treatment.

The treatment consists in reducing the inflammation, and in preventing the flow of blood to the head : this we effect by taking twelve or fifteen pounds of blood at different bleedings.

Apply lotions of cold water to the nape of the neck ; give slightly purgative draughts and clysters.

ABDOMINAL VERTIGO

Is occasioned by repeated indigestion, and the horse, which is affected by it, is not distressed as in the true vertigo : the treatment is the same as for indigestion.

Treatment.

Aloes is employed with advantage in doses of from an ounce and a half to two ounces in pills. It is mixed up in two quarts of wine.

DISEASES OF THE EYE.

These are frequent, and are most generally occasioned by blows. Those of the eyelids are frequently met with : there is a swelling of these organs, and there is nothing more required than to apply to these parts a lotion of cold water, in which a few drops of sugar of lead have been mixed, which will entirely remove them.

OPHTHALMIA

Is the inflammation of the conjunctive membrane which lines the eyelids, and encloses the eye, and is very painful. It is most generally produced by a draught of air. The horse, which is attacked with it, keeps his eye closed, allowing the tears to ooze out ; sometimes, this disorder is caused by overfeeding, or bad stabling.

Treatment.

This consists in removing the producing cause, making use of astringent lotions from the beginning ; if that treatment does not succeed, we must employ emollients, regimen, and lotions of elder water. A moderate bleeding often suffices to arrest the progress of the disorder.

PERIODICAL DEFUXION.

So called, because it recurs at certain periods. At the commencement it presents the same appearances as ophthalmia ; but some days afterwards the aqueous humor (the front humor of the eye, that which is visible) becomes turbid, a circumstance which never takes place in ophthalmia.

Treatment.

As soon as the defluxion becomes fairly established, it is difficult to effect a cure ; but it has been remarked that a change of climate,

a well regulated diet, gentle bleedings, and mild purgatives, diminish the severity of the attack.

CATARACT

Is a thickening of the crystalline lens. Being nearly invariably the unfortunate termination of the periodical defluxion, it is an incurable affection, when it has once been fairly established.

GUTTA SERENA, OR AMAUROSIS,

Is paralysis of the optic nerve; the eye retains its usual brilliancy, yet, despite of that, the horse is deprived of vision. This affection is very difficult to be observed, and we can only attain that knowledge by an accurate study of the eye, the inner extremity being colorless, and the pupil not contracting.

EXTERNAL INJURIES.

WOUNDS AND DIFFERENT ACCIDENTS.

POLL.EVIL

Is an inflammation, which comes on at the superior extremity of the head, (the nape:) it is caused by a blow upon this part, or by too tight a headstall, which occasions a swelling, and excruciating pain : the horse can no longer bear any thing, and throws himself back on his haunches, if we attempt to bridle him.

Treatment.

In order to remove the cause of this affection, the part should be bathed with mallows water, and the horse be prevented from rubbing himself; a collar, instead of a halter, should be put on him, and he should not be bridled.

WRUNG WITHERS.

This is a very dangerous complaint. It is occasioned by too severe a pressure upon this part, produced by the saddle fitting badly, or by the bad arrangement of the saddle cloth. This disease

is always very dangerous, and brings on an inflammation which lasts a long time, and prevents a horse doing his duty properly in the cavalry.

Treatment.

In order to remove the cause, a horse, with galled withers, should carry nothing on his back: from the first, rub in upon the part, a spirituous embrocation composed of a pint of brandy, and an ounce of soap: if the swelling continue, apply a blister made of turpentine, and sublimate (eight ounces of Venice turpentine, and two drachms of corrosive sublimate): anoint the part with it, after having shaved off the hair.

INJURY OF THE KIDNEYS.

A swelling in the loins, produced by a pressure on those parts; almost always the fault of the trooper, who does not pay sufficient attention to the saddling of his horse, and the stowing of his kit.

Treatment.

We remove the cause, by putting the portmanteau along with the baggage: raise the shabracque so that it may not touch the injured part; keep this part quite free; and, if the skin be not broken, use a spirituous embrocation to the affected part: if there be a wound, keep it clean, and dress it with dry tow.

GUNSHOT WOUNDS.

These cause a shock of the system, which is always dangerous for the horse which is injured by them, and the serious nature of it increases according to the parts which are struck.

Treatment.

The first point to be attended to is to endeavor to extract the projectile in so far as the part struck will allow us: if a considerable swelling ensues, we must enlarge the apertures by which the ball passed in and out; the wound will then be dressed with tow and a simple digest, composed of an ounce of tar, and the yoke of an egg. The horse must be put upon bran and water, and straw; sometimes, we may gently bleed him.

SWORD CUTS.

These are not dangerous, except when any of the vessels or tendons are cut through ; but if nothing but the skin be divided, we must hasten to close it by sewing it up, bringing the edges together by means of a curved needle and waxed thread : put the horse upon diet, and let him keep perfectly quiet.

SHOULDER SLIP

Is the distension of the ligaments, which connect the *scapular-humeral* joint (the first joint of the shoulder) an injury which lasts long and is very difficult of cure. It is caused by a fall, or by the horse slipping when he is turning, or getting up.

Treatment.

The horse must be kept perfectly quiet, with abundance of litter : rub the shoulder joint. For an embrocation, put into a common bottle four ounces of essence of turpentine, four ounces of camphorated spirit of wine, a drachm of super acetate of lead, and fill up the bottle with vinegar : rub around the injured part for a quarter of an hour, and take care always to shake the bottle well before you use its contents.

STRAIN OF THE STIFLE JOINT.

Is the distension of the ligaments of the *cocco-femoral* (the first joint of the hip :) it is as serious as that of the shoulder and is treated in the same manner.

STRAIN OF THE FETLOCK.

Is the distension of the tendons and ligaments which connect this joint. This affection, like the preceding ones, produces lameness and is treated in the same way.

EXCORIATION OF THE PASTERN.

When a horse entangles his pastern or leg in the slack of his halter, a chafing, and even wounds, which are somewhat difficult to cure, are the result.

Treatment.

In order to effect a cure, wash the injured part with white lotion made of from thirty to forty drops of sugar of lead in a bottle of water, and wash it several times a day : greasy substances are not at all suitable for an accident of this nature. When the inflammation is very great, use a lotion of mallows water.

GREASE

Is often produced by want of cleanliness or bad stabling : it is difficult of cure, and makes the horse go lame. It attacks the pasterns and fetlocks.

Treatment.

The affected parts must be kept very clean ; free them from the scabs which form there, and cut off the hair, and from the first wash them with white lotion (as above) ; if inflammation ensues, they should be washed with mallows water, and when the inflammation has disappeared they should have an ointment applied to them, composed of hogs-lard and verdigris, (eight ounces of lard, and two drachms of verdigris mixed together.)

INJURIES OF THE FEET.

OVER-REACHING, OR SPEEDY CUT.

This term is applied to bruises either with or without the skin being broken, produced either by one of the other feet, or by a foreign body : they only require to be kept clean ; but, if they are neglected, they degenerate into tumors.

TUMORS.

Inflammatory swellings : they are distinguished, according to the part affected, into cutaneous, muscular, horny, and cartilaginous. The first, which is termed a simple tumor, has its seat in the skin itself, and is cured by cleanliness.

The muscular tumor affects the flexor muscle, or the tendinous sheath; (the sheath that covers the tendons.)

Treatment.

Complete rest and emollient cataplasms (made by boiling bran or mallow leaves, putting them in a cloth and fastening the latter round the limb,) are sufficient to arrest their progress.

The horny tumor, since it is seated under the hoof, shows itself on one of the quarters, and requires an operation.

The cartilaginous tumor, characterised by the caries of the labial cartilage of the bone of the foot, is the most serious of all, and requires the cutting away of this cartilage. All these tumors are most generally caused by neglected speedy cuts: thus, the first care to be taken, when a horse has overreached himself, is to cleanse the wound by cutting away the hair, and the rugged portions of the skin or of the hoof, and to put a compress upon the wound with tow dipped in the essence of turpentine and a bandage.

SAND CRACKS

Are splits in the hoof, following the direction of the fibres, and are distinguished, according to their position, as fibrous (*soies*), sand cracks (*seimes*), cleft hoof (*pieds de bœuf*) and false quarter, (*seimes-quartes ou en quartier*).*

The first, which are situated on the toe, generally attack the hind feet.

The false quarter almost invariably attacks the inner quarter of the forefeet, because it is the weakest part: in general, brittle hoofs are those which are most exposed to sand cracks.

Treatment.

There is one method of curing them, which is to grease them repeatedly with foot ointment, composed of a pound of hogslard, four ounces of beeswax, two ounces of turpentine, and two drachms

* These terms have given us some difficulty, as we have but one generic name for sand crack, wherever situated. (Trans.)

of oil of olives, the whole melted together. Tar and grease is also used.*

FOOT FOUNDER

Is a serious affection of the reticular tissue (formed by the blood vessels) in which inflammation shows itself to a greater or less extent. This disease is always produced by external accidents, or by too heating a diet: a long march in hot weather may bring it on. It is shown by the difficulty which the horse experiences in walking: he supports himself upon his limbs with great difficulty, only bears upon his heels, moves only when compelled to do so, hangs his head and refuses food.

Treatment.

It consists principally in extracting the blood. Bleed plentifully, put the horse standing in the river for some hours: apply frictions of essence of turpentine to the fetlocks and loins; put the horse upon bran and water with saltpetre. Give him emollient injections with saltpetre.

THRUSHES.

This disease arises from the issue of a blackish humor, which has its seat in the cleft of the frog, and may destroy it.

Treatment.

The frog must be cleansed, and pared down: apply to it pledgets, (small strips made of tow) steeped in essence of turpentine.

CANKERS.

A disease of the same kind as the preceding, only carried to a higher stage: it requires the same treatment.

QUITTOES

Is an eating ulcer, which alters and changes the tissue of the frog, and even of the sole, whence a fetid and acrid humor issues.

* Firing on the coronet above the sand crack sometimes proves efficacious. (Trans.)

Acrid mud, bedding saturated with dung, and urine may cause this disease.

Treatment.

It consists in placing the horse upon a dry soil, having his frogs pared, and removing those portions of the hoof which slough away. Dress with tow steeped in the essence of turpentine, or with Egyptian ointment.

BLEYMES

Are bruises, occasioned to the sole of the heels, and sometimes to that of the quarters whilst marching over hard ground, and sometimes are the consequence of bad shoeing.

Treatment.

The hoof must be pared, the bruised portion removed from the surrounding parts, dress with tow dipped in the essence of turpentine, and put on a circular shoe; (a shape which fits better, and which protects the sole of the foot better than a common shoe.)

PROUD FLESH

Is a collection of small fleshy excrescences of a red color, which arise in the parts, where the quick is laid bare: compression must be employed.

CORNS

Are excrescences more or less great and extensive, which are observed in the sole of the quarters of the forefeet: they arise from a projection or tumor of the lower surface of the bone of the foot: this osseous disease is almost invariably caused by bad shoeing.

Treatment.

We must put on the shoe, called the bulb shoe, which contains a cavity for its reception.

THE TENDER HOOF

Is produced by a loose shoe, which springs up and down, ham-

inners the sole, and produces an irritation which makes the horse go lame.

Treatment.

Consists simply in removing the cause, and shoeing properly.

LE CLOU DE RUE—(THE STUB NAIL.)*

Is any stray nail that a horse's hoof picks up on the road, which enters more or less deep into the quick, comes out again, or remains sticking in, and makes the horse go lame.

Treatment.

We must, as soon as we perceive that a horse goes lame, lift up the foot, and extract the nail, if it be still sticking there : take off the horse's shoe, and lay the wound open to the bottom ; dress with tow and the essence of turpentine : keep this dressing on by means of iron bars which the shoe holds on. Stumps, or pieces of wood, that get into the frog, produce the same effect, and demand the same care.

COMPLAINTS CAUSED SOLELY BY SHOEING.

SIMPLE PRICKING—(LA PIQURE.)

The piercing the quick with a nail which is driven in, and drawn out again before it is completely driven home : this prickling is sometimes followed by a few drops of blood, and by sensible pain on the part of the horse. The accident arising from shoeing generally passes off without any serious consequences ; however, it is a good plan not to drive that nail, and to pour into the *etampure*, (the groove in the shoe, which receives the head of the nail,) a drop of some essence.

* This can hardly be numbered amongst diseases of horses, and is not, that we are aware of, mentioned in any English book on Farriery. It is difficult to translate the term; but the meaning of it is explained in the text. (Trans.)

SEVERE PRICKING (L' ENCLLOURE.)

The same kind of accident as the foregoing, the only difference being that the nail remains in the foot, which makes it more serious; it requires the same attention, and sometimes we are obliged to take off the shoe.

THE BURNT SOLE.

Accident produced by a red hot shoe, or one simply heated, that the farrier presses against the sole.

We ascertain that the sole has been burned, when, on paring the hoof, we find the sole honeycombed with small holes (open pores) from which a serous yellowish humor oozes.

Flat hoofs are very much exposed to this.

Treatment.

Take off the shoe, pare the hoof, and apply a bran cataplasm.

THE HEATED HOOF.

Does not differ from the preceding, except that it does not proceed to so great an extent: it arises from the same cause, and requires the same treatment.

CUTS OF THE SOLE WITH THE FARRIER'S BUTTRESS (PARING KNIFE.)

They cause incisions more or less deep, produce pain and lame the horse.

Treatment.

The hoof must be pared, and dressed with brandy and tow: a general rule, in shoeing is to fit the shoe to the hoof, and not the hoof to the shoe, as farriers commonly do; to pare the foot equally throughout, and to put a shoe on which touches every part; if this be not done, the horse does not stand fairly.

OF THE *aplomb* (PERPENDICULAR BEARING.)

By the *aplomb* we understand the regular distribution of the mass of the body upon the four extremities designed to support

it. The correctness of the *aplomb* requires such a disposition of the limbs that the line of gravitation of the different centres of gravity should pass through a point of the base.

It has been shown that in a well made horse a vertical line, drawn from the top of the withers to the ground, will pass over the point of the knee: a line, drawn from the upper and after third part of the forearm to the ground, ought to divide into two equal parts all the radii of the limb, and consequent fall very nearly in the centre of the surface of the foot.

A line, drawn from the scapulo-humeral joint, (the upper joint of the shoulder,) will fall exactly upon the point of the toe: in like manner, a line drawn from the middle of the narrowest part of the forearm to the ground, ought to equally divide the rest of the limb.

IN THE HIND LIMBS.

(*Seen sideways.*)

A perpendicular dropped from the femoro-tibial joint, (the second joint of the hip), ought to fall on the forepart of the toe, so that another line, drawn from the cocceal-femoral joint, will fall behind the hoof; a line, drawn from the middle of the ham, divides the rest of the limb into two equal parts: these are the proportions laid down by *Bourgelat*; they are founded upon the theory of the centre of gravity, and, when they exist in perfection, the animal stands easily; that is to say, the four extremities are in the same direction, which has caused it to be said that each limb supports one-fourth of the whole weight of the body. In order that the horse may stand well and with ease, it is necessary, not only that the direction of the limbs should be such as we have just said; but further that every part should be sound, in order that the perpendicular may be perfect: the deviation from the perpendicular may arise from the limbs being placed too far in advance or in the rear, and too much out, or too much in.

If the forelimbs are carried to the rear, the animal is said to be gathered under himself: if they are too far advanced, he bears on his heels, and the lever of the limb is thrown considerably back.

In the hind limbs, the horse is gathered under when the toe is too far forward. In this case, they sustain a considerable weight, a lateral deviation constitutes horses either in-kneed, or bow legged, according to its being outwards or inwards.

ON GREEN FOOD.

This is particularly suited to young horses; however, old ones have been sometimes put on it to an advantage, especially those which have suffered from inflammatory disorders; which are disgusted with dry food; are laboring under lameness, or vermicular, urinary, ringworm, itch, affections: these causes generally require the use of green food.

The contrary is the case, in glanders, farcy, and recent disorders of the chest: horses, put upon green food, require to be very carefully watched; because the disorders, which arise from its use, are rapid, and occasionally very severe, if not taken at once. The most frequent are colics and indigestions: the first thing to be done is to take the horse off green food, walk him about, and rub him well down when he comes in: if the colic continue, give him a bottle of salt water, or of wine and oil mixed, adding a few drops of ether to it: if the conjunctive membrane be red, he must be bled copiously, and have injections given.

Generally speaking, all these attacks are inflammatory; they are met by bleeding and diet.

We perceive that green food agrees with horses, when they eat it freely, when they are lively, their coat sleek, and they return to it imperceptibly; (that is, not by fits and starts); on the other hand, when the horse is dull, hangs his head, does not eat, coughs, and has his coat staring, we must hasten to take him off it, and put him upon dry food.

Horses, which are about to be put on green food, ought to be prepared for it by four days of bran, and straw mixed with green food: the same precautions should be adopted when this diet ceases, in order to prevent the change being too rapid, and producing disorders.

Manner of giving it.

Green food should be given, a little at a time, and often, hour by hour, and we should be careful to remove the remains of the former supply, so as not to disgust the horse: meadow grass answers best the eight or ten first days, because its effects are more purgative; afterwards, we give lucerne, or clover: this last food requires great precautions, because it is very heating, and produces serious complaints: this is remedied by mixing it with meadow grass: the horses, which fatten too fast, ought to be bled.

Horses on green food should be walked daily, and bathed also, if the time will allow of it.

CHAPTER XLI.

MEDICAL INSTRUCTION.

This instruction is divided into three parts: the first treats upon some points of military hygeia, the second embraces very succinctly a small number of internal and external diseases; and the third teaches us to compound and administer the medicines which these same diseases require.

We shall find described therein the mode of rendering assistance in the first instance to the soldier with simply the resources which localities may supply, and without having recourse to medicine.

I have taken care, in order to render myself easily understood, to employ as much as possible terms generally known, or expressions which supply the place of technical terms.

Note. The figures, placed between brackets, refer to the third part of the medical instruction: they point out in it the medicines, which should be made use of.

FIRST PART.

MILITARY HYGEIA.

Military hygeia is that branch of medicine, which has for its object the preservation of the health of the soldier.

It lays down the mode, in which he should use those things which are necessary to him; and how he may modify or remove the causes of the diseases which prey upon him.

FIRST CHAPTER.

Of the Precautions to be taken regarding Recruits when they join.

We should endeavor as much as possible to place together lads of the same country : the soldier, finding himself amongst his fellow countrymen, who speak his own dialect, and possess similar habits, feels less the awkwardness of his novel condition. We should also avoid fatiguing him too much, and arrange that his daily duties be proportioned to his strength. By these means, he gradually becomes accustomed to military toil, without his health thereby suffering.

By adopting this plan, which is very practicable, we shall prevent the development of those maladies which have their origin in morbid melancholy and fatigue, and we shall not disgust, with the military life, many young men who, at starting, have an inclination thereto.

SECOND CHAPTER.

Art. 1. In order to complete the clothing of troopers, it would be proper to add to it a flannel bandage, applied over the belly, and moderately tightened : it would often prevent hernia of the walls of this cavity, a complaint so common amongst them. When the troopers found themselves compelled to make long, difficult, and rapid, marches on foot, they would derive great benefit from its use.

This band also has the property of keeping the stomach warm, and guarding it from the effects of humidity and cold, which are such common causes of disease, especially upon service. A skilful general caused them to be worn by his men, who were bivouacked upon the banks of the Ebro, between Tortosa and Amposta. By this plan, he checked the progress of a diarrhœa with violent colics, which was wasting his army, and which had developed itself under the influence of the causes, which I have just mentioned.

Art. 2. The suspensory bandage (passing between the thighs) is not less useful to troopers. It is an efficacious method of pre-

venting injury to certain organs in the violent motions of the horse, and preserving them from diseases which accidents of this nature may occasion.

CHAPTER THIRD.

Of Liquids.

Art. 1. All water, which has not an unpleasant taste, and dissolves soap readily, is good for drinking and for every culinary purpose. Water, which does not possess these requisite conditions, ought to be strictly interdicted to the men.

If we are compelled to drink bad water, it should be mixed with wine, brandy, vinegar, or any acid liquor adapted for that purpose.

In those places, in which we are compelled to drink stagnant, or muddy, water, it would be useful, in order to guard against swallowing leeches, to strain it through linen. If this accident should happen, we get rid of the leeches by large draughts of water in which common salt has been dissolved.

If we are in need of water, we must make men chew branches, leaves, bushes, or the roots of plants ; and, if these be not at hand, they must roll about in their mouths small pieces of leaden balls, small shells, &c. in order to produce a great flow of saliva, which they swallow to quench their thirst. Sea water bathing also decreases thirst.

Art. 2. Spirits taken to excess are very injurious to the soldier; but a moderate use of this liquor may be of use under several circumstances of active service. They are particularly useful during the raw and damp winter nights. During the heats of summer, they are equally useful on the march and in extensive manœuvres, in order to keep up the tone of the organs, and to check the profuse perspiration, which exhausts the strength, and which renders chills extremely dangerous; but, in this last case, one pint of spirits should be mixed with six or seven pints of water. This beverage is excellent.

CHAPTER FOURTH.

Art. 1. If the detachment, whilst marching, has to be quartered in any public building, the commanding officer ought to proceed thither first, in order to ascertain whether it combines all the requisites of salubrity. If it have been infected by men laboring under a contagious disease, he should lodge his men elsewhere, and he should bivouac them rather than expose them to the danger of contagion.

Art. 2. When the detachment is marching in summer, it ought to contrive to arrive at its destination, before the sun has attained power. If it be constrained to march the whole day, it should make two long halts; for fatigue, combined with overpowering heat, may induce even amongst robust soldiers, attacks of apoplexy, accidents which we witnessed in Spain, and very recently in Algiers.

Art. 3. When it marches in winter, during a very rigorous frost, we ought carefully to prevent men, who appear to be benumbed, from remaining behind to lie down: they will speedily fall asleep and pass into the sleep of death. When the cold produces these fatal effects, we ought to accompany the men even to their billets, and prevent their approaching the fire too hastily. But they will do well to drink a very hot draught of one-fourth of wine mixed with three-fourths of water. If a man has any part of his body frost-bitten, it must be rubbed gently with snow, or washed with water at the freezing point, and he must keep away from the fire until the warmth and circulation are restored. (*Vide Asphyxia by cold*):

Art. 4. When a detachment requires to halt, it is necessary to select, as far as circumstances will permit, to wit, in winter, an open and dry place, exposed to the sun's rays, and sheltered from high winds; in summer, umbrageous places, not too cool, in the neighborhood of woods or rivers; but, whatever may be the season, it is necessary especially to keep at a distance from marshy places, or those in which the earth has been recently stirred.

Arrived at the halting ground, those men, who are much heated, should not quench their thirst, until they have rested awhile:

they must never divest themselves of their clothes and expose themselves to the coolness of the atmosphere. This caution is particularly addressed to men in a state of perspiration.

Art. 5. Soldiers, travelling in a hot and arid country, are usually very thirsty: the water, which they drink with avidity, causes profuse perspiration, which only weakens them, and increases their thirst. In order to meet this inconvenience, the officer in command, before quitting the halting place should issue orders for every man to provide himself with good vinegar, or, what is better still, brandy, to mix with the water. By these means, they will more readily quench their thirst, and will prevent many diseases from showing themselves.

Art. 6. At the termination of a march, especially in hot weather, the men should be recommended to wash their face and eyes. They ought also to wash their feet as often as circumstances will allow of their doing so. In summer, when halted, as in garrison, they will bathe from time to time in running water. The most proper time for bathing is early in the morning before breakfast, and not after exercise, or a long march.

CHAPTER FIFTH.

Of Encampment.

Art. 1. The ground most adapted for encampment is a sandy, dry, and open, plain, sloping slightly towards the south or east, or the banks of a river or streamlet, and in the neighbourhood of a wood.

We must never, if we can avoid it, encamp upon damp ground, surrounded by a marsh. If we cannot avoid this unpleasant necessity, we should dig ditches in different directions, in order to allow the water to run off.

The vicinity of a river is of great service to a camp; not only for furnishing water for men and horses to drink, but also for the maintenance of cleanliness, and keeping up the freshness of the air. Different points for drawing water, according to the wants

of the detachment, should be established at the upper part of the stream; next comes the watering place; then the place for washing clothes; and the shambles should be further down the stream. Guards for the maintenance of order should be stationed at these different points; and, if the river be turbid, wells should be sunk at a little distance from the banks in order to furnish a supply of water which has been filtered through the ground. A couple of stout planks should be thrown across these excavations, in order that the men may draw the water at their ease, without having to apprehend the crumbling in of the edges.

A wood is of essential service in supplying fuel for culinary purposes, and the fires of a bivouac. We ought, however, never to forget that the ground in extensive forests is always damp, and we ought to pitch at a certain distance from it to avoid contracting fevers produced by humidity. In 1809, before the battle of Raab, General Séras, whilst proceeding towards that town, bivouacked his whole division for a single night only in a large forest: the next morning, when moving off, a considerable number of his men were attacked with fever.

Art. 2. Troops, when encamped, ought to lodge either in barrack huts, or tents: these last are insufferable in summer during the day time on account of the stifling heat which is experienced in them; and, in winter, they do not sufficiently keep out the cold and damp. The barrack-huts are more serviceable: they are more roomy, more elevated, and ought to have a window knocked out opposite the door.

Every man ought to sleep in his respective tent or hut. They ought to be strictly forbidden to go outside of them during the night in their shirts or barefoot. This bad habit is one of the causes of dysentery which often causes such ravages in armies.

The straw, which forms the soldiers' bedding, should be burned, and renewed every fortnight. If we neglect this precaution, and if we preserve this straw for horses' litter, it becomes a focus of corruption, which communicates typhus fever to the men.

The excrements and exuviae of the animals, slaughtered in the camp shambles, should be buried very deep every day. The dung heap should be carried away or burned daily.

Art. 3. If typhus, or dysentery, show itself in camp, we ought immediately to break ground, and select a more eligible spot. If circumstances will not allow us to make this move, we must redouble vigilance as to the cleanliness of the camp, often renew and burn the straw, reduce the number of men in each tent, and send every man to the hospital the moment that he is taken ill.

In winter, camps are no longer tenable: if we obstinately persist in remaining in them despite of the rain and the frost, typhus fever and inflammatory diseases of the chest will commit frightful ravages.

CHAPTER SIXTH.

Of Bivouacs

Bivouacs ought to be formed, as far as possible, upon a spot which combines the conditions pointed out in the article upon encampment. A detachment, which bivouacs, ought to receive a double ration of spirits. Those, which are supplied with it, send much fewer men into hospital than those which are reduced to drink nothing but water.

It sometimes happens in a winter campaign, and when the cold is severe, that the vicinity of the enemy prevents our making fires in our bivouacs. In this painful situation, we should guard against giving way to a treacherous sleep, which might be succeeded by death. Orders must be issued to every man to wake up those of their comrades, who sink overpowered by the imperious demands of somnolency.

CHAPTER SEVENTH.

Of the Influence of Climate upon the Health of Troops.

Art 1. In cold climates, the men ought to be not only warmly clothed, but also supplied with more abundant and nourishing food than in warm ones.. The cold produces in them an insatiable desire to drink spirituous liquors; it is requisite to satisfy

this desire, we ought therefore to serve out extra rations and spirits on all occasions when the campaign is prolonged beyond the month of October in cold climates. The soldiers must drink their brandy in small quantities, as it is served out to them, and must be cautioned against hoarding up several rations in order to have a drinking bout.

Those, who in the retreat from Moscow did not impose this restraint upon themselves, dropped down dead in the act of drinking spirits. If we neglect to take all these precautions, the cold exhausts the strength of the soldier, and fatal maladies show themselves.

Art. 2. In the warm countries of Southern Europe we ought to keep our armies as far removed as possible from marshy countries. If we are compelled to halt there, we must place the men in raised dwellings, make them wear warm clothing, and serve out an extra ration of wine or brandy. We ought, further, to reduce the guards at night, and direct every man, not on duty, to return home by sunset. In these unfavorable circumstances, drills and parades should be less frequent, and much shorter than usual, whilst we ought to select the driest spot for the drill ground. The men should not be ordered out for drill until after breakfast.

SECOND PART

FIRST SECTION.

EXTERNAL MALADIES

INFLAMMATION.

When any part feels painful, is swollen, red, and hotter than usual, it is inflamed, and there is often fever: this last then is produced by inflammation.

Treatment.

Apply, according to the extent of the inflammation, fifteen, twenty, or thirty, leeches, to the seat of the disorder. When the

blood has flowed properly, put over the part an emollient cataplasm, (No. 16), which is to be renewed twice a day; use the drinks, (Nos. 1 and 6); eat nothing, and keep quiet.

BOILS.

Boils are known by a swelling, which rises rapidly; which is hard, hot, and painful, of a red color, terminating in a point, and deeply seated in the skin. When ripe, the boil gives forth a small quantity of thick matter. Boils sometimes produce a swelling of the glands of the groin* In proportion as the boil heals, this enlargement of the glands disappears.

Treatment.

Subdue the local inflammation by means of emollient cataplasms, (No. 16), of simple ointments of lard, or fat that is not salt. Troopers, especially those who have tender skins, should wear drawers, to prevent the friction of the cloth trowsers upon the skin, producing this complaint. When boils are numerous, and spread over different parts of the body, tepid baths should be used, and the bowels opened two or three times with the purgative, (No. 12), or any other.

WHITLOWS.

The inflammation, which shows itself at the extremities of the fingers, is denominated a whitlow. This complaint is characterised by pain with a throbbing, which is sometimes intolerable. The affected part is red, very sensible to pressure, and often swollen.

Treatment.

Apply, on the first sensation of pain, ten or a dozen leeches to and around the affected part: bathe the hand three times a day in a tepid emollient decoction (No. 16), which must be renewed on each occasion: keep the arm in a sling, and have recourse to leeches more than once in the first twenty-four hours. By these means, we often prevent the inflammation from forming.

* We have here elided a sentence not fit to appear in a work for general reading. (Trans.)

SWELLED CHEEK.

In this complaint, which every body knows, there is swelling with a feeling of discomfort, and generally very little pain.

Treatment.

Two emollient cataplasms, (No. 16), daily upon the swollen part; a foot bath morning and evening of very hot salt water; keep the body warmly clad, and take as a constant drink the ptisan, Nos. 1, 6, 7, or 10. If the swelling arises from decayed teeth, have them extracted.

INFLAMMATION OF THE NOSTRILS.

It is characterised by pain, swelling, redness, and greater heat than ordinary at the opening of the nostrils. This complaint is very often found in men who have a bad habit of picking their nose.

Treatment.

Introduce into the nostrils, two or three times a day, cerate, or else hog's lard or fresh butter. Make use of the feathered end of a pen for this purpose. Bathe the tip of the nose in the emollient decoction No. 14. Discontinue the custom of thrusting the finger up the nose.

INTERNAL INFLAMMATION OF THE EAR.

The patient feels in this part a pain, more or less acute, accompanied by singing and humming noise: sometimes, there is very violent head ache on the side of the affected ear.

Treatment.

Employ, from the commencement of the attack, all the means recommended by art for similar cases to dissipate the inflammation, which often, when it terminates in suppuration, produces deafness. The principal ones are the following: twenty leeches behind the affected ear, and let the blood flow freely: introduce

into the passage of the ear a little cotton soaked in oil of sweet almonds; produce vomiting five or six times with the emetic, (No. 11), keep the throat and all the head warmly wrapped up in flannel: take a very hot foot bath morning and evening, in which you will mix two ounces of powdered mustard or salt; a ptisan with a little sugar for your customary drink (Nos. 1, 6, 7, or 10), remain in bed, and starve yourself.

INFLAMMATION OF THE EYE (OPHTHALMIA.)

The white of the eye is of a bright red; it is the seat of great heat, and an unpleasant pricking sensation. The light is very difficult to be borne, and sometimes becomes insupportable.

Treatment.

Apply twenty leeches to the temples, but not to the eyelids: let the blood flow freely. Bathe the eyes frequently with luke-warm mallows water, (No. 14), and keep them constantly covered with bandages, soaked in the same decoction. Shun the light, induce vomiting five or six times with the emetic, (No. 11), take daily two foot baths of hot salt water: drink a refreshing ptisan of Nos. 1, 2, 6, and 7, and eat sparingly.

ITCH,

Consists in small pustules, at the top of which appear blisters. Itching accompanies the appearance of the pustule, and it is generally felt more at night owing to the heat of the bed.

Itch shows itself inside the arms, the fore arm, the thighs, the legs, between the fingers, and on the belly.

Treatment.

You may employ a sulphur lotion or a sulphur ointment, (Nos. 17 and 18.)

* We have here elided five pages upon venereal diseases, as a subject not suited to any but professed medical works. (Trans.)

With the sulphur lotion you rub the arms, the hands, the belly, the thighs, the hams, and the legs. This ought to be done twice a day, morning and evening. The dose is two ounces for each lotion ; the bottle should be well shaken, before pouring out the liquor into a plate, or any earthenware vessel proper to contain it.

The sulphur ointment is employed twice a day in a dose of half an ounce for each rubbing in ; the parts already mentioned are rubbed gently. The apartments of men with itch ought always to be kept warm.

We should always be careful to send to the wash the linen which a person affected with the itch has used. The woollen clothes, which cannot be thus dealt with, ought to be exposed to the vapor of sulphur in a small and well closed apartment. They are placed upon an osier hurdle, or any thing which will answer the same end. Beneath this apparatus is placed an earthen pan, in which flowers of sulphur are burnt ; but, before exposing them to it, the cloth lining ought to be washed with boiling water and soap, and well dried, in order that the woollens may imbibe the vapor of the sulphur. The same course must be pursued in order to disinfect the coverlets, the sheets, and the pillows.

BURNS.

This injury offers different degrees which we must understand in order properly to regulate the treatment.

In the first degree, the burning body has produced only a slight irritation of the skin, with redness, heat, and pain.

In the second degree, the burnt part shows blisters.

In the third, there is destruction of the skin that is burned : it is then of a greyish yellow, or black, color.

Treatment.

First degree.—Plunge the injured part, at the moment of the accident occurring, and keep it for several consecutive hours in a liquid composed of sugar of lead and cold water, (two dessert

spoonfuls of sugar of lead to a pint of water) which must be renewed as soon as it gets warm. If this be not procurable, make use of water at the freezing point, or the coldest water possible. If the burn be on the back, the belly, or the chest, apply bandages steeped in either one or the other of the above liquids. When it is in the face, let the patient bend his head over a basin and frequently damp the burn with a sponge or soft linen. Lastly, if the whole body be burnt, the patient should be put into a cold bath, into which sugar of lead has been thrown in the proportions indicated. By employing means of this description, we often see burns of the first degree entirely disappear.

Second degree.—Commence with the treatment which has just been described, and after it has been employed for some time, open the blisters, to allow the serous matter to escape. The puncture should be made with a large sewing needle. You may prick them in several places : the epidermis, which forms the blister, is not sensible. Then cover the burned part with bandages smeared with cerate, or with a mixture of equal parts of oil and the yolk of an egg, or else, again, with grease or fresh butter.

When the burn has extended over the surface of the whole body, we ought immediately to plunge the patient into a cold bath, and keep him in it for several hours ; then put bandages or towels tightly round the body, smeared with cerate, or the other substances which we have just mentioned.

Third degree.—The same means as in the two preceding cases. As there is generally fever in this last case, we must prescribe diet, and cooling drinks. The sores which form ought to be dressed with lint spread plentifully with cerate, or else with a mixture of oil and the yolk of an egg.

CHILBLAINS.

Chilblains consist in an inflammation of the skin, which shows itself in winter, and which results from the alternate action of cold and heat. The part affected is swollen, painful, and hot : there are also prickling and itching sensations ; and, lastly, the color of

the skin is more or less livid.* The feet are the most usual seat of chilblains; they affect more particularly the toes and the heel. They sometimes appear on the nose, the ears, and the lips.

Treatment.

When chilblains are coming on, and when, as yet, there is neither heat nor pain, but only a troublesome itching, nothing is better than to repeatedly moisten the affected parts with soap and water, urine, the ley of vine ashes, and even with camphorated brandy. When, in spite of these appliances, the inflammation increases, the chilblains should be covered with a linen rag spread with cerate and kept warm. If they ulcerate, they must be dressed with cerate spread upon lint.

ON THE METHOD OF CLOSING WOUNDS OF THE SKIN BY MEANS OF PLAISTERS.

We ought to re-unite the edges of the wounds of the skin, when it has been merely divided by a sharp instrument; but, if any instrument has destroyed, or ruined these edges, the re-union becomes impracticable.

In order that nature may glue together the lips of a wound when brought into immediate contact, it is necessary that they should be bleeding at the time; or if inflammation has set in, the matter should be nearly white, and that the two lips of the divided part should be covered with a healthy granulation. Thus, we should not endeavor to close with plaisters, 1st, gunshot wounds, the edges of which are contused and destroyed; 2d, a wound, which has been neglected, exposed to the action of the air, and the highly inflamed edges of which only produce a sort of bloody fluid.

Before bringing the edges of a wound together, we must remove the coagulated blood, and any gravel that may be found inside it, and which would prevent their close contact.

In closing a wound, we should put the wounded part in such a position that its lips touch completely. If, then, it be situated transversely at the forepart of the neck, the position necessary

towards its reunion is the keeping the head bent. The skin, in every case, ought to be relaxed as much as possible.

To effect the re-union, we make use of adhesive plaasters, such as diachylon, or the gum known by the name of Andrew of the Cross, which is spread upon linen. We make strips of them, whose length, width, and number, are in proportion to the length, depth, and gape of the wound.

When the wound is two inches long, and not very deep, two strips of $\frac{5}{12}$ of an inch wide, and six inches long, are sufficient.

Before applying them, they should be warmed in order to soften them. One of these strips is put on, in one half of its length upon one part of the wound, then the lips of the other half must be brought together, and the other half of the strip is applied to the remaining portion of the incision.* It must be well understood that the strips are always applied transversely to the wound.

The first strip ought to be placed at that part of the wound where the edges gape most. When there are several applied to one wound there ought to be intervals left between them to facilitate the discharge of pus.

The union having been completed, some lint is put on the wound with compresses and a suitable bandage.

OF THE MEANS PROPER TO CHECK CERTAIN HEMORRHAGES CAUSED BY WOUNDS.

When, in consequence of a wound in the head, not going to any depth, the blood flows freely, it is sufficient, in order to arrest the hemorrhage, to apply over it a little lint with a compress folded eight or ten times; the whole ought to be soaked in salt water, and kept in its place by tying a bandage or handkerchief sufficiently tight over it.

It is very useful, prior to checking the hemorrhage, to allow that quantity of blood to flow, which would follow from a copious bleeding: by these means the patient will not be exposed to many ill consequences which might follow without this precaution.

* The author means, we presume, the second strip, though he does not express himself thus. (Trans.)

Hemorrhages, produced by wounds of the hands or feet, are dressed in the same way as those of the head. Nevertheless, if, notwithstanding this dressing, the blood continues to flow, we must make use of the compress described hereafter, as the only method then of checking the flow of blood.

In violent hemorrhages, arising from wounds of the arm, or forearm, we must employ a compress above the wound; and, in order that this compression may be of any use, we must find a point of support on the opposite side to that on which it is made. In the arm, it should be made only upon one point. This is the manner of doing it.

We apply, inside the arm, at the junction of its upper third with the lower two-thirds, three or four compresses, moistened with water, each of which ought to be doubled eight times: these compresses, when folded, ought to be the width of the palm of the hand. A slip of wood, a tile, or any hard and flat body of the same size, is then introduced into one of these compresses. On the opposite side, that is to say, outside the arm, and at the same distance, pieces similar to the first in number, and of the same size, are applied.

All these pieces being thus disposed, they are kept in position by a large compress, which goes round the arm, and this apparatus is made sufficiently tight either by a fillet, or leather strap, or a pocket handkerchief, in such a manner that the pressure shall act only upon the compresses. By these means, we stop the flow of blood.

For hemorrhages of the thigh and leg, we make use of the same apparatus, only the pieces, which compose it, will be somewhat larger in consequence of the size of the limb. It is at the centre part and inside the thigh that the compression should be made: outside, that is to say, on the opposite side, and at the same height, we apply the same number of pieces; the whole is then drawn tight, as laid down above, and the wound is dressed with lint, a compress and a bandage.

The patient is then put upon diet, and one of the ptisans, (Nos. 1, 6, 9, or 10), and taken to the hospital as soon as possible, there

to have the attention paid to him, which such serious wounds require. He must be taken thither with as little jolting as possible.

CONTUSED WOUNDS.

Contused wounds occur in consequence of a fall upon some hard substance, or by blows with a cudgel, or a blunt sword. The skin is torn to a greater or less extent, and the parts covered by it are contused in different degrees.

Treatment.

Simple contused wounds are washed with cold or salt water, only at the moment when they are received; they are then covered with lint and a compress, and the whole is kept in its place by means of a fillet or bandage adapted to the part. If inflammation supervene, we must have recourse to emollients, such as mallows water, (No. 14), or cataplasms, (No. 16); but it is requisite in both cases that the wound be covered with lint, and that its edges, before the application of this last, be rubbed with cerate.

OF WOUNDS, WHICH SUPPURATE, AND THE MODE OF DRESSING THEM.

When a wound requires to be kept open, the surrounding hair must be shaved off, and the wound covered with dry lint: above this lint a double compress is placed which is kept in position by a bandage.

If the wound be very extensive, and fever be apprehended, the patient must be put on diet, and on one of the drinks, (Nos. 1, 2, 6, 7, 9, and 10), during the two or three first days of his wound. The injured limb must be kept as quiet as possible: if the wound be in the arm or hand, the fore arm will be supported in a sling; if, on the other hand, it be in the thigh, the leg, or the foot, the patient must keep his bed until a thorough cure is effected.

The first dressings of a wound must not be removed until the third day. This time is necessary for the subsidence of the local irritation.

The following is the method for removing the first dressings : the fillets, the compresses, and the lint are taken off in succession ; they must be moistened, when either the blood or matter have caused them to adhere : you lay hold with your fingers of the lint which you cannot remove after having moistened it with lukewarm water ; you then, by the assistance of a soft linen rag wipe off the matter which adheres to the edges of the wound : the bottom of it is cleansed by pledgets of lint, which you introduce very gently, and at several times.

This operation over, a little cerate is put round the lips of the wound ; lint is then put over, and the dressing is concluded as before. Afterwards, the wound is dressed daily, and even twice a day, if the suppuration be abundant.

OF CONTUSION.

It is the consequence of a blow more or less violent, which has struck some portion of the body. The injured skin turns a violet black, and sometimes it swells. This black color has obtained for it the term of *echymose*.

Treatment.

If the contusion be on the arm or leg, the limb must be plunged immediately into cold salt water for four or five hours : we must take care to renew it repeatedly that it may not grow warm. After the limb shall have been taken out of the water, we must apply, every two hours, over the contusion, compresses of cold salt water, and continue this plan until the echymose is dispersed.

If inflammation shows itself at the expiration of twenty-four hours after treatment, we must discontinue the salt water, and replace it either by baths and fomentations, or by mallow water, (No. 14), or any emollient decoction, and apply leeches to the seat of pain, and repeat them several times, if necessary.

Contusions on the buttocks and thighs, not allowing of cold bathing, we must apply over the swollen part compresses of salt water, or, better still, of ice, and let the rest of the treatment be the same as the foregoing.

When the head has received a very severe contusion, and dimness of sight immediately follows the blow, if it be impossible to bleed with the lancet in the foot, a practice, which is of such service in like cases, we must apply fifty or sixty leeches to the feet, and let the blood flow until the patient becomes very faint. In the absence of leeches we must have recourse to cupping of the thighs and legs, and very hot foot baths. It would also be very useful, in every case, to keep the bowels freely open by means of injections of salt water, and the purgative (No. 12). His diet also will be laid down, and he will be allowed nothing to drink, but one of the ptisans, (Nos. 1, 2, 6, 7, 9, and 10). Contusions of the breast and belly require copious blood letting from the arm, and then plenty of leeches upon the seat of pain, or, better still, cupping: then diet, and the drinks (Nos. 1, 2, 6, 7, 9, and 10), and perfect rest.*

SPRAIN.

A sprain consists in a severe wrench sustained by a joint, the bones of which have been violently forced in opposite directions.

This injury frequently occurs to the ankle joint, and the wrist.

Treatment.

Immediately after the accident, plunge the injured limb into very cold water for at least four hours. Take care to renew the water before it begins to get warm.

The injured part, after having been withdrawn from the bath, must be constantly wrapped round with a compress and a bandage, which must be repeatedly moistened with salt water or cold vinegar.

The joint, which has suffered, must be kept perfectly quiet.

If the sprain be in the foot, the patient must confine himself to

* We have here again excised a passage of our author, not adapted for the general reader. (Trans.)

his couch : if it be in the arm or wrist, the fore arm must be kept constantly in a sling.

If, after having employed the means, here laid down, for a week, the torture and pain continue, it will be necessary to apply every other day from four to five leeches to the seat of it, and to bathe the injured member morning and evening in lukewarm mallow water, or any other emollient decoction (No. 11) : emollient cataplasms ought also to be applied over the joint, they should be sufficiently large to go completely round it.

This treatment ought to be continued until the limb returns to its natural state. Note ; if, at the moment, when the sprain occurs, leeches are procurable, thirty or forty should be applied to the injury, and the blood allowed to flow freely. In this case, it would be useless to keep the limb in cold water, or to apply compresses soaked in salt water or vinegar On the contrary, we should, after the leeches have dropped off, employ emollient cataplasms, or fomentations of the same nature.

OF FRACTURES.

General rules relating to them

1st. Before applying the first dressings to a fracture, it is requisite that assistants should bring the fractured portions into their proper position, giving them their natural length and direction.

2d. The compresses and bandages should have neither selvage nor hem, when employed in fractures, it is necessary to moisten them with salt or plain water, before applying them to the surface : in the fracture of the shoulder blade, only the compresses, in contact with the injured bone, should be moistened.

3d. The name of splint is given to a resisting, flexible, long, and narrow lath, which is used in treating fractures to keep the broken bones in contact, and prevent their being displaced. Most usually, splints are made of wood, but sometimes the bark of a tree, leather, steel, pasteboard, &c., are employed in their construction.

4th. When the fracture is accompanied by a wound, this last ought always to be dressed, prior to the application of the apparatus.

5th. After the fracture has been reduced, the patient must be put upon a regimen, and allowed to take nothing but broth. He will make use of one of the ptisans (Nos. 1, 2, 6, 7, and 10), lemonade, or sugar and water.

FRACTURE OF THE NOSE.

When a hard body has struck the nose, and the upper portion has fallen in, fracture has taken place. The patient ought to proceed immediately to the nearest surgeon to have it reduced ; without this precaution, the bones will re-unite, displaced as they are, and considerable deformity will be the result.

Whilst waiting for the bones to be replaced, the contused part must be covered with compresses soaked in salt, or common, water.

It would, however, be easy to reduce this fracture, and here is the method of doing so. The patient, being seated upon a chair, his head supported against the breast of an assistant placed behind him, we introduce into the nose a plug of a cylindrical form, of very hard wood, and of the thickness of a quill ; and then by gently pressing from below upwards, and from behind forwards, whilst a finger of the other hand supports the external part of the nose, the fragments of the fracture are brought back into their natural position.

FRACTURE OF THE LOWER JAW.

In this fracture, we feel upon the lower edge of the jaw a projection, more or less defined : the teeth, which correspond to the portion of the bone which lies lower than the rest of the jaw, are naturally lower than the others.

Treatment.

Apply to the jaw a compress soaked in salt water, which, being doubled six times, ought to be three fingers' width or breadth, and

sufficiently long to wrap up the chin, and the sides of the jaw as far as the ears : this compress ought to be kept in its place by a bandage, the middle of which will cover the chin and the rest of that bone. The ends of this bandage, after having been crossed at the back of the head, will be carried between the temples and the ears, in order to be fastened on the forehead by means of a knot. We then apply under the jaw the middle of a handkerchief doubled four or five times, and the ends of which, after having passed under the ears, will be fastened on the crown of the head.

**FRACTURE OF THE CLAVICLE (THE BONE WHICH, BY THE FRONT,
PASSES FROM THE BOTTOM OF THE NECK TO THE SHOULDER.)**

This fracture is recognised as follows :

The arm hangs by the side of the body ; the fore-arm is extended, and the whole limb is turned inwards. The patient inclines his head and chest on this side, and can move the arm neither forwards nor upwards. If we pass the fingers under the collar bone, we feel a prominence in the fractured part.

Treatment.

Place under the injured armpit a cushion of a wedge shape, of which the base, or thickest portion, is turned uppermost. This cushion ought to be five inches long, and four broad. The thickness of its base must be a good two fingers' width, and that of its lower extremity half an inch. It ought to be made of old linen and cotton ; wool, bran, or any other thing that will answer the same purpose, may be substituted for the latter.

To its two upper corners are attached two strips of cloth, which serve to fasten it over the opposite shoulder ; one of these strips ought to pass in front of the chest, and the other behind : they are tied together between the neck and the tip of the shoulder. The lower part of the cushion is brought close to the breast, by means of a wide bandage, which passes over it, and goes all round the body : the arm is then kept close to the cushion by means of several other bandages wound round. The fore-arm is then put in a sling.

The fracture should be covered with two or three compresses soaked in salt water, kept in their place by a small bandage or pins.

We can substitute for this cushion several pocket handkerchiefs, which, being rolled up together, are put into the same form and size.

This bandage thus applied will make the projection of the fractured bone disappear.

FRACTURES OF THE ARM, THE FORE-ARM, THE THIGH, AND THE LEG.

We generally ascertain the existence of these fractures, 1st, by the displacement of their parts, and their being shortened. We obtain this indication by the eye, the touch, and measuring the length of the limb ; 2d, by the grinding noise of the two fractured ends, which is heard on moving the injured limb ; 3d, by the difficulty, or impossibility, of moving it ; 4th, by the pain endured.

FRACTURE OF THE ARM.

We must apply over the fractured part three double compresses, four fingers' width broad, and sufficiently long to pass once and a half round the arm. Above and below these first compresses, we apply others to surround those portions of the arm which remain bare, they ought to be drawn moderately tight. We then place four splints, two inches in width ; the first, outside the arm ; the second, inside ; the third, to the back ; and the fourth, to the front ; but, before applying them, they must be wrapped up separately in wet linen. These splints ought not to extend beyond the elbow or the shoulder. The whole are kept in their proper place by five strips of cloth an inch wide, or any other ligatures that may happen to be at hand.

The first strip ought to be placed at the middle part of the arm, the second and third a little below and above the first, and the two others towards the ends of the apparatus : they are fastened with a knot and a bow outside the limb.

The pressure which these ligatures exert ought to be equally diffused over the whole length of the apparatus. The arm is then put in a sling.

FRACTURE OF THE BONES OF THE FORE ARM.

In order to reduce this fracture, it is necessary to have, 1st, two compresses folded separately twelve times double, seven inches long, and one and a half wide ; 2nd, two small splints, wider by a few tenths than the compresses, but of the same length ; 3rd, two compresses, half a foot wide, and twice as long ; 4th, a bandage two ells long rolled up, and five strips. The following is the method of applying this apparatus.

We place lengthwise upon the inside of the fore arm in line with the palm of the hand a compress folded twelve times ; another compress, similar to this last, is applied in the same manner to that part of the fore arm, which is in a line with the back of the hand ; they ought to extend from the elbow to the wrist. A splint is then laid upon each compress, and the fore arm is then wrapped round with the remaining two compresses. This apparatus is kept in its place by means of ligatures, or of a wide bandage which goes all round the fore arm, from the wrist, where it begins, up to the elbow. The pressure of this bandage ought to be moderate, and the fore arm should be kept constantly in a sling.

FRACTURE OF THE THIGH.

I suppose that the patient requires to be dressed, whilst on the road : the following is the method of making and applying the apparatus.

Six strips of cloth, of two fingers' width broad, and three-quarters of an ell long, are extended upon the ground, at the distance of four inches from each other. Upon these strips, and across them, is extended a piece of cloth as long as the limb, and two feet and half wide. Across, and over, this cloth are placed bandages three inches wide, sufficiently long to pass once and a half round the limb which they are designed to embrace, and in sufficient number to wrap round the whole thigh. The first bandage ought to correspond with the upper edge of this cloth, and the lower two-thirds of it ought to be covered by the second bandage ; this, in its turn, is covered in the same way by the third, and so on throughout.

The apparatus being thus arranged, the fractured thigh is placed upon the middle of the bandage, and in the direction of the length

of the cloth : it rests upon the bandages with which it is in immediate contact. The limb being thus placed, an assistant presses with one hand upon the groin on the side of the injury, whilst another puts the limb in its right position. A third person then covers the fracture with three or four compresses half a foot wide, and twice as long, soaked in salt water ; moistens the bandages, and brings them round the thigh, beginning at the part nearest the knee. The ends of the bandages of one side ought to cover and lap over the ends of the opposite side.

We then place round the thigh three splints of two inches and a half wide, and a few tenths thick : the first outside the thigh ; its upper end touches the hip, and its lower one the ankle bone : this splint is wrapt up in the edge of the piece of cloth, which is outside the thigh, until it is brought into close contact with the limb, and the parts already named.

The second is applied inside the thigh : its upper end touches the fork, and its lower one the ankle bone : it ought to be wrapt up in the piece of cloth, which is at the inside of the thigh, until it is in close contact with the limb.

The third splint is placed upon the front part of the thigh : its upper end reaches to the groin, and the lower one proceeds as far as the top of the shin bone.

Between these splints and the limb is placed tow, or compresses that their pressure may be moderate and uniform.

The splints being thus applied, a person embraces the whole apparatus with both his hands, whilst another binds on the strips of linen which are to keep it in its place. The ligature, which corresponds to the fracture is first fastened, then those above and below, and afterwards the others. They are tied with a running knot outside the limb.

The patient, after having received this first dressing, ought to be taken to the hospital. The carriage ought to be long enough to enable him to lie down in it, with his limbs at their full stretch : it is proper that it should be supplied with straw, hay, or a mattress. In order to put him into the carriage, it is necessary that one person should be entrusted with supporting the leg and thigh, at the same time that others lift the body.

FRACTURE OF THE BONES OF THE LEG.

The apparatus for this fracture is prepared and applied as follows :

We place at full length upon the ground four linen strips as broad as the width of two fingers, half an ell long, and at the distance of three inches from each other. Above and across these strips is placed a piece of linen sufficiently long to take in the lower part of the thigh, and the leg to within an inch of the ankle joint : it ought to be two feet wide. Upon this piece of linen, and in the same direction as the strips, we lay out bandages three inches wide, and sufficiently long to go once and a half round the limb, and in sufficient number to embrace the limb from below the knee to the ankle joint. The first bandage ought to have its lower two-thirds covered by the second, that again in like manner by the third, and so on with the rest.

The apparatus being thus prepared, the limb is placed on the middle of it, and in the direction of the length of the piece of linen : it rests upon the bandages, and is in immediate contact with them. We make an assistant hold and keep the leg steady, whilst another assistant holds the foot, a third person then covers the fractured place with several compresses, as in the fracture of the thigh ; he moistens the bandages, and puts them on the leg, commencing quite close to the ankle joint. The ends of the bandages upon one side ought to cover and lap over those of the other side.

The limb is then surrounded with three splints : the first must be placed inside the leg, its upper end ought to pass from eight to ten inches above the knee, and the lower end two inches beyond the sole of the foot. In this way it touches the inside of the thigh, the knee, and the ankle. It is then wrapped in the edge of the piece of cloth, which is inside the limb.

The second splint ought to be of the same length as the first, and to be placed outside the leg : it must touch the thigh and the ankle joint. It ought to be wrapped up in the edge of the linen, which is on the same side as the splint.

The third ought to be placed in front of the leg, and touch with its upper end the top of the knee, its lower end rests upon the instep. It ought not to be wrapped round with cloth.

Between these splints and the injured limb is placed tow or compresses, as on the fracture of the thigh.

These splints thus applied, a person embraces the whole apparatus with both hands, whilst another fastens the strips, which are to keep it in its place. The ligatures are then tied as in the fracture of the thigh. One of them ought to be placed a hand's breadth above the knee: the others are for the leg.

The apparatus being in its place, the middle of a bandage is passed under the sole of the foot: its ends are then brought back over the foot, to cross them there, and to fasten them with pins to the piece of linen which surrounds the main splints of the limb, to prevent the foot from moving.

In taking the patient to hospital, the same precautions are to be observed as for the fracture of the thigh."

FRACTURE OF THE BONES OF THE FINGERS AND OF THE TOES.

The fracture of one of these small bones is always accompanied by wounds, or contusion; in this case, we must place a splint on the side opposite to the wound, to prevent the finger bending: it is kept firm by a small bandage, not passing over the wound, in order to be able daily to dress it, without removing the splint. The wound is then dressed as elsewhere directed.

METHOD OF APPLYING LEECHES.

The leeches must be removed from the water at least an hour before applying them, in order to render them eager to bite.

Before putting them on, the place is washed with lukewarm water, and dried: it is then moistened with milk, or sugar and water; you next put the number of leeches that you require into a piece of fine linen, and bring them all into one body which you place upon the seat of pain under a wine glass to prevent the leeches going to a distance. You then draw the edges of the linen outside the glass in order to apply the leeches to the skin. By this means they cannot adhere to the edges of the glass, as they are confined between the linen and the skin.

When the space is very limited, as on the eyelids, the lips, the gums, &c., they are put on by means of a glass tube, or else a tube made of a playing card. In thus applying them, it is necessary

that the head of the leech, which is much more pointed than the tail, should be directed towards the skin.

CUPPING GLASSES.

As cupping glasses may, in many cases, be employed in the absence of leeches, I will here point out the method of applying them : it is a task that any body may undertake.

The cupping glass is a small glass bell, whose mouth is much narrower than the other end, which is rounded. A common wine glass, or any similar vessel may be substituted for it.

Before applying it, two small wax ends are lighted, or else a little paper, cotton, tow, or hemp, which are put upon a card placed over the skin : this small preparatory affair is then covered immediately with the cupping glass ; the part forthwith becomes red and swells, and the cupping glass adheres with great force to the skin. Before taking it off, it should be allowed to remain there at least three minutes.

To remove the cupping glass, we depress, with the end of the finger, the skin outside its edges, when it will come off directly.

When the cupping glass is removed, slight scarifications are made with the edge of a razor. In order to produce an abundant flow of blood, the cupping glass is put on afresh on the same place ; but, before doing so, the scarifications should be well excited by a cloth dipped in very hot water.

SECOND SECTION.

INTERNAL DISEASES.

OF FOREIGN SUBSTANCES STICKING IN THE ALIMENTARY CANAL, (THE OESOPHAGUS.)

The numerous bodies, which stick at the bottom of the throat, may close the orifice of the windpipe, and menace the patient with suffocation. If we can reach these foreign bodies, such as bones, fish bones, &c., we extract them with the fingers ; if they have passed down into the oesophagus, we act differently, according to

the description of the foreign bodies. When they are not of a nature to jeopardise the life of the patient, we endeavor to force them into the stomach, by making him swallow liquids, soft food, such as soup, spinach, cabbage cut in large pieces and not thoroughly boiled ; or else we push them down by means of a whale bone, or osier twig, furnished with a sponge at the end, &c. If there be cause to apprehend that they will produce serious consequences in the stomach, we excite coughing and sneezing by tickling the nostrils or throat with the feather end of a pen. We may also induce vomiting ; often, in similar cases, the results are satisfactory : we cause the patient to swallow oil, or an emetic (No. 11) ; sometimes the alimentary canal is so impeded that it is impossible to make him swallow any thing : we may then produce vomiting with the decoction of an ounce of tobacco, which is boiled for a quarter of an hour* in a quart of water, administered as an injection.

SWALLOWED LEECHES.

When leeches have been swallowed, an accident which sometimes occurs in hot countries, whilst drinking stagnant water, we get rid of them by copious draughts of salt water. If they have attached themselves to the cavity of the nose, or the back of the mouth, we must repeatedly sniff up the same water.

INFLAMMATION OF THE THROAT.

When the mouth is open, and we press down the root of the tongue with a spoon, we perceive this inflammation upon the uvula, and upon the glands placed on each side of the entrance of the throat. These glands are at this time much larger than usual, and are painful to the touch. Solids and liquids are swallowed with difficulty ; sometimes their passage into the stomach is impossible : fever often accompanies this inflammation.

Treatment.

1st. Apply, at the commencement of this complaint thirty leeches to the throat in the seat of pain, and allow the blood to flow free-

* How is the patient to support respiration during this quarter of an hour whilst the remedy is preparing ? (Trans.)

ly. Abstain from food, and drink nothing but lukewarm barley water, with sugar or honey in it, or any other emollient drink, such as that of the flowers of mallows, or white mallows, (Nos. 2 and 6.)

2. Take, morning and evening, a foot bath of hot saltwater, for a quarter of an hour, procure some stools by means of purgative injections. (No. 13.)

3. Apply twice a day, on the front of the throat an emollient cataplasm (No. 16,) put between two pieces of soft linen. The throat ought to be kept warm with two neckerchiefs, one of which surrounds the throat; and the other, after having wrapped up the bottom of the underjaw is tied in a knot upon the crown of the head.

INDIGESTION.

When it arises from the stomach being overloaded with food of a good quality, it is sufficient to make abundant use of drinks such as the ptisan of dog's-grass, (No. 7), lemonade, or sugar and water. Induce also some stools by means of injections of lukewarm water. In cases, where these simple means are insufficient, we must have recourse to vomiting by putting the finger down the throat, or by taking the emetic (No. 11); and then drink for a couple of days some glasses of the bitter ptisans, (Nos. 3, 4, and 5.)

SLIGHT IRRITATION OF THE STOMACH.

It is characterised by the clammy state of the mouth, loss of appetite, depraved taste, and often by a weight on the stomach, or inclination to vomit.

Treatment.

Diet; use of such drinks as barley ptisan, dog's-grass, gum arabic water, (Nos. 1, 6, and 7), slightly sugared, keep yourself warm.

If the irritation be greater, and if there be, along with the symptoms previously pointed out, a redness of the tongue, and pain in the stomach with fever, we must add to the treatment above detailed the application of twenty or thirty leeches to the stomach, and emollient fomentations (No. 15). Then send the man to hospital.

DIARRHÉA.

Soldiers are very subject to this complaint. It is often caused amongst them by the bad habit which they have of taking cold drinks, when they are perspiring or by eating fruit in excess.

Treatment.

Conjee water, or gum arabic, or else ptisan of dog's-grass, (Nos. 1, 7, and 9); these drinks ought to have a little sugar in them, and be drank lukewarm. Take only broth in small quantities, and keep the body warm.

NERVOUS COLICS.

This is the name given to those pains which gripe the belly all of a sudden. Cold water drank in a state of perspiration often occasions them, as well as food of an inferior quality. These colics are not accompanied by signs of inflammation, such as redness of the tongue, thirst, and fever.

Treatment.

If they appear after having eaten food of a bad quality, wine must be drunk in moderation, and bitter drinks taken (Nos. 3, 4, and 5). Sugared gum arabic water, or even simple sugared water, drank very hot, generally suffice to allay the pains, when produced by cold drinks.

POISONING BY MUSHROOMS.

The effects arising from mushrooms may, in general, be reduced to the following; gripes, inclination to vomit, evacuations upwards and downwards, heat of the bowels, languor, sharp and almost constant pains, cramps, convulsive spasms of one part or other of the body, insatiable thirst, pulse small, hard, wiry, and rapid. In certain circumstances a species of drunkenness comes on, a confused delirium, and a kind of drowsiness, into which the patients fall, until the pains or spasms arouse them; but sometimes their intellectual faculties quite clear. In general, these symptoms do not appear until 5, 7, 12, or 24, hours after the mushrooms have been eaten.

SIGNS, WHICH RENDER MUSHROOMS SUSPICIOUS.

Mushrooms, which grow in the shade, in dense forests which the sun does not penetrate, are in general, very bad.

Treatment.

In a case of poisoning by mushrooms we ought never to give to drink vinegar, water strongly impregnated with salt, nor ether, as long as the mushroom has not been passed either upwards or downwards.

As soon as symptoms of poisoning by mushrooms are experienced, administer three grains of emetic in a wineglass of water; a quarter of an hour afterwards, give at three separate times with twenty minutes interval a second glass of water in which have been dissolved three grains of emetic, (for which may be substituted twenty-four grains of ipecacuanha), and an ounce of Glauber's salts. After having induced vomiting, the mushrooms, which may remain in the intestines, must be evacuated by means of purgatives. Every half hour must be given a dessert spoonfull of a draught composed of an ounce of castor oil, and an ounce and a half of peach blossoms: give a purgative injection, prepared by boiling together for a quarter of an hour in a pint of water, two ounces of pounded cassia, half an ounce of senna leaves, and half an ounce of Epsom salts. If no evacuations take place, repeat the injection twice or thrice; and, if, notwithstanding the employment of the means pointed out, the mushrooms are not evacuated, and the disease gains head, we must boil for a quarter of an hour an ounce of tobacco in a quart of water, and then give the liquid in the shape of a *lavement*: vomiting is almost invariably the result of employing this recipe.

After the evacuation of the poison, give the patient some spoonfull of a draught composed of four ounces of orange flower water, a quarter of an ounce of ether, or of Hoffman's liqueur, and two ounces of syrup of sugar or white mallows.

If the disease, instead of abating, make additional progress, and the patient complain of excruciating pains in the belly, order sugar water, gum arabic water, grains of ~~Antseed~~, or roots of white mal-

lows (Nos. 1, 2 and 9); apply to the seat of pain, linen cloths soaped in one or other of these two last liquide, and put the patient in a bath. If the pain do not abate, apply fifteen or twenty leeches to the part where the pain lies.

If it so happen that we are unable to assist the patient until he is already in a high fever, his belly swollen and very painful, the tongue parched, and the thirst extreme, the heat of the skin, mouth, and throat, excessive, we must discard irritant purgatives: we must then content ourselves with putting thirty or forty leeches on the belly, and employing emollient fomentations (No. 15), and *lavements* of a decoction of lintseed made very mucilaginous.

DRUNKENNESS.

Generally, the symptoms of drunkenness disappear of themselves, at the expiration of ten, twelve, or fifteen, hours: but, as the contrary may occur, and the disorder then becomes dangerous, the following is the plan to be pursued.

Commence by making the man take two or three grains of emetic dissolved in a wine glass full of water; a quarter of an hour afterwards, give warm water, and tickle the throat to induce vomiting. When the patient has vomited, make him drink every ten minutes half a wine glass full of water in which has been mixed a spoonful of vinegar or citron juice; give a purgative injection (No. 11), and if it do not take effect, give a stronger one; rub the whole body with linen dipped in vinegar. If, notwithstanding the employment of these remedies, the drowsiness continues, or increases, and the patient is a full blooded man, bleed from the foot, or, better still, apply a dozen leeches to the nape of the neck.

COLD IN THE HEAD.

The symptoms of this complaint are the following: slight redness of the eyes, weight in the head, sensation of tickling in the nostrils, sneezing. After the cold has lasted some days, there is a running of mucous lymph from the nose.

Treatment.

Keep yourself warm: take a foot bath morning and evening;

use lukewarm and sugared ptisans, either of pearl barley, or flowers of mallows, or white mallows, (Nos. 2 and 6.)

Very often cold in the head arises from insufficient clothing; a flannel jacket and worsted stockings will then remove it.

PULMONARY CATARRH.

A damp cold, especially during the period of sleep or rest, lying on cold bodies, damp clothing, are the principal causes, which often bring it on: it commences with a cold in the head, and thence falls upon the lungs.

The second or third morning after catarrh has established itself, the patient feels a difficulty in his throat: there is therein a kind of rattling with spitting; the appetite is gone, and the head heavy; often there is fever.

It is generally sufficient, in order to its dispersion, to make use from the beginnir.g of the ptisans (Nos. 1, 2, 6, 7, and 10). These drinks ought to be taken lukewarm and sugared. Take care to keep your bed, or else be warmly clothed.

ASPHYXIA, OR SUFFOCATION.

We term *asphyxia* the suspension of the function of respiration, and consequently those of the brain, the circulation, and all the other functions. A person in asphyxia is then in a state of apparent death.

I shall here only speak of three kinds of asphyxia, which are the most common on service; they are caused by water, heat, and cold.

ASSISTANCE TO BE GIVEN TO PERSONS DROWNED.

(ASPHYXIA BY WATER.)

We must commence the treatment even in the boat which has helped to fish up the drowned person, upon the bank, or in any neighboring and convenient place.

For the carriage of the patient we will employ a litter, a hand barrow, or any other carriage; we will put him upon straw or a mattress; we will lay him on his side, his head exposed and slightly elevated. In case it shall be impossible to transport him in the manner which we have just mentioned, two persons will lay the body upon their arms, or seat it upon their hands joined together. We must eschew rough shaking for the purpose of recalling the drowned man to life.

1st. Whilst one person with a pair of scissors cuts off the wet clothing of the drowned man, he will be laid upon his right side in a bed slightly more elevated at the head than the feet, and which is placed in a room in which there is a fire burning: the head is supported in front and slightly inclined: we get rid of the water lodged in the mouth and nostrils, by separating the jaws.

2nd. Wave under the nose lighted brimstone matches, or put smelling salts to it: we can irritate the nose by moving gently in the nostrils a small roll of paper, or the feather of a pen. Whilst this assistance is being given, another person endeavors to restore warmth to the patient. The body ought only to be warmed gently with very hot woollen cloths. Heated bricks are applied to the soles of the feet: a heated smoothing iron especially is passed over the body: we pursue a general system of friction with hot flannel, or even with the hand. After having done this, we continue the friction with a cloth soaked in camphorated brandy, or in vinegar.

3rd. Inject air into the lungs with the nozzle of a pair of bellows by one nostril, another person keeps the other one closed, or places his own mouth on that of the patient.

4th. Give an injection made with water in which four ounces of salt have been dissolved, or one of three parts water, and one vinegar.

5th. If the drowned man do not come round, burn on the pit of the stomach, the thighs, and arms, small pieces of match, linen, or paper.

6th. If his state improve, and if it be possible to make him drink, give him, if he swallow easily, in the space of five or six minutes,

a spoonful of camphorated brandy, or eau de cologne mixed with two-thirds water..

7th. If the drinks administered cause an inclination to vomit, give two or three grains of emetic dissolved in a wine glass full of water.

8th. It often requires from eight to ten hours unremitting care to recover a drowned person.

TREATMENT OF PERSONS SUFFOCATED BY HEAT.

It sometimes happens that one is suffocated from having remained for a long time in a warm place.

The asphyxied person, who forms the subject of this article, experiences a great difficulty in breathing, and sense of suffocation ; he becomes weak, loses his strength and recollection, and falls into a state of drowsiness. His eyes are more or less red and closed. This complaint has several degrees : in every case, we should hasten to administer the following remedies.

1st. Place the asphyxied person in a cool place, and agitate the air before his mouth.

2nd. Undress him, unless the weather be very cold, (for then we must confine ourselves to merely loosening his garments), lay him upon his back, with his head and chest slightly more elevated than the rest of the body.

3rd. Make him swallow water and vinegar mixed in equal proportions, or lemonade.

4th. Excite the soles of the feet, the palms of the hands, and the whole vertebral column with a hard hair brush, or hot water. Tickle the nostrils also with the feather of a peacock, or salt volatile.

5th. Give an injection of cold water mixed with one-third vinegar ; a few minutes afterwards, give another, prepared with water, three ounces of common salt, and one ounce of Epsom salts.

6th. Apply ten leeches to the temples, if the disease increase or do not diminish.

7th. Inject air into the lungs with the nozzle of a bellows by one nostril, whilst the other is closed.

8th. If this accident should occur to soldiers, in consequence of forced marches in very hot climates, (we have had instances of them

in Spain and Africa), we should, at the very instant of its occurrence, put the patient in the shade, under cloaks and handkerchiefs stretched over swords or lances, and there employ the appliances of art according to the local resources, but which must be selected from amongst those pointed out in this article.

9th. If, some hours after these preliminary steps have been taken, the patient can endure a carriage in order to be taken to his halting ground, he must be placed in it, care being had to make him lie on his back, with his chest a little higher than his body. He ought also to be protected from the sun.

ASPHYXIA BY COLD.

When an individual has been subjected for a long period to the action of intense cold, the following points present themselves to our attention: the nerves experience a general and painful irritation; a shivering creeps over the whole body, which becomes pale, livid, and benumbed; a profound sleep supervenes, and, if the action of the cold continue, the vital spark is extinguished.

Treatment.

1st. In removing the asphyxied person to a place adapted for administering the proper remedies to him, his body must be wrapped up in anything convenient to cover him, leaving only the head exposed.

2nd. Strip the body, cover it with snow, and rub every part of it with this substance, or, if it be not procurable, with a sponge, or cloth, dipped in water at the freezing point, then with water with the chill off and lastly with lukewarm water; water is sprinkled upon the face, observing the same precautions.

3rd. If neither snow nor ice be procurable, the patient is plunged into a cold bath, which is gently warmed by adding by degrees at first water with the chill off, then water less cold, and lastly tepid water: water is sprinkled on the face with the same precautions.

4th. The asphyxied person is then removed from the bath in order to subject him to frictions with brandy upon the breast and

belly, directing these frictions towards the upper and lower extremities ; then excite the soles of the feet, the palms of the hands, and the whole vertebral columns with a stiff hair brush. The lips and interior of the nostrils are tickled with a feather or any light body ; air is thrown into the lungs by introducing the nozzle of a bellows into one nostril, and blowing, whilst the other is kept closed ; or else a person applies his mouth to that of the patient and blows into it : lighted brimstone matches are waved under the nose, in order to irritate the interior of that organ, or else he is made to smell sal volatile, but we must be upon our guard against keeping the bottle containing it for any time under the nose.

5th. When warmth begins to return to the body, and the limbs are no longer stiff, the patient must be put in a dry bed, but not warmed with the warming pan ; give him an injection composed of two-thirds of cold water and one-third vinegar ; some minutes afterwards give another prepared with cold water, three ounces of common salt, and an ounce and a half of Epsom salts (Sulphate of Magnesia).

6th. As soon as the patient can swallow, make him drink vinegar and water, broth, or water in which a red hot iron has been dipped.

7th. Solid food should not be allowed until some hours after complete recovery.

FROST BITTEN.

When a part is frost bitten, it is no longer sensible ; it has lost its heat ; the pulsation of the arteries has ceased ; it is stiff, slightly swollen, and of a livid hue.

Treatment.

The patient ought to be brought into a place, of which the temperature is only very slightly higher than that of the external atmosphere.

The frozen part is then plunged into the coldest water that can be found, or else it is covered with snow, which is frequently renewed. This treatment must be continued without interruption.

In proportion as the snow or very cold water revives the affected parts, we perceive the violet and black spots disappear, the swelling subside, and the other symptoms disperse. We shall know that the part is beginning to return to its natural condition; when it becomes soft, warm, red, and sensible: then is the time to make use of only frictions with hot flannel, or of compresses steeped in wine or brandy: internally, sugared wine and broth must be given.

THIRD PART.

OF THE PREPARATION AND ADMINISTRATION OF CERTAIN MEDICINES.

No. 1. *Gum Arabic Water.*

Take, powdered gum arabic half an ounce—boiling water, a bottle and a half—sugar, two ounces. Let them dissolve.

No. 2. *Pectoral Ptisan.*

Take, flowers of mallows, or leaves and flowers of white mallows, one ounce—boiling water, one bottle. Let the infusion stand half an hour, and add honey, one ounce.

N. B.—For the honey may be substituted the syrup of white mallows, capillaire, and sugar.

No. 3. *Bitter Ptisan.*

Take, wild chicory, half a handful—boiling water, one bottle. Let the infusion stand in a close vessel for half an hour.

No. 4. *Another..*

Take, powdered gentian root, one ounce—boiling water, half a bottle. Infuse as before.

No. 5. *Another.*

Take, root of patience, (*Lapathum*), half an ounce—common water, one bottle—boil for half an hour.

No. 6.—Barley Ptisan.

Take, pearl barley, an ounce and a half—common water, two bottles—boil down to a bottle and a half, and, when finished boiling, add a quarter of an ounce of scraped liquorice.

N. B.—The decoctions of hempseed, oatmeal, oats, are made in the same manner, and in the proportions laid down. They can be substituted for the barley.

No. 7.—Dog's grass Ptisan.

Take; bruised root of dog's grass, a quarter of an ounce—scraped liquorice root, a quarter of an ounce—common water, one bottle—boil half an hour.

No. 8.—Lintseed Ptisan.

Take, lintseed a quarter of an ounce—scraped liquorice, a quarter of an ounce—common water, one bottle—boil half an hour.

N. B.—We may further obtain a mucilaginous ptisan by substituting for the lintseed an ounce of hempseed pounded, or of the root of white mallows.

No. 9.—Rice Ptisan.

Take, rice, one ounce—common water, two quarts. Boil down to a bottle and a half, and, when the boiling is finished, add scraped liquorice, a quarter of an ounce.

No. 10.—Decoction of Crumbs of Bread.

Take, crumbs of wheaten bread, one ounce—common water, two bottles—boil for eight minutes—pass the boiling decoction, gently squeezing it, through a muslin, and add sugar, two ounces.

No. 11.—Emetic.

Take, tartar emetic, three grains, dissolve in lukewarm river, or spring, water—take three ounces at two separate times.

N. B.—If the first half cause vomiting four or five times, there is no occasion to take the second. And, as soon as vomiting begins, warm water should be drank copiously, to assist the effect of the medicine

No. 12.—*Purgative Draught.*

Take, tartar emetic, three grains, dissolve in a bottle and a half of river, or spring, water.

Take a common wine glass full every three quarters of an hour.

N. B.—After five or six evacuations, discontinue to take it. If, in taking this purgative in the manner laid down, the patient experiences a desire to vomit, the dose must be taken only every hour. The effect of this purgative is very gentle.

No. 13.—*Purgative Injection.*

Take senna leaves, three quarters of an ounce—boil during a quarter of an hour in a sufficient quantity of water—after boiling, dissolve in it, Epsom salts, half an ounce, tartar emetic, four grains.

N. B.—If it be impossible to procure this lavement, on account of the component parts, we may employ in its stead a mixture of one part vinegar to three parts water, or very salt cold water. If this lavement produce no effect, take another immediately.

No. 14.—*Emollient Lavement.*

Take, mallow leaves, two handfuls,—boil for half an hour in a sufficient quantity of water for an injection.

N. B.—The root of white mallows, lintseed, wheat bran, may be substituted for the mallows: these substances are even preferable to it; the decoction ought to be mucilaginous: the yolk of an egg beaten up in water, as also starch, can likewise answer the same purpose.

No. 15.—Moist emollient Fomentations

Moisten a cloth folded four times, or oftener, with the decoction which answers for emollient injections, (No. 14), and cover the affected part with it : renew it every three hours. It is suitable for wounds accompanied with inflammation.

To prevent the fomentations cooling, apply over the soaked cloth, flannel, or any woollen substance.

No. 16.—Emollient Cataplasm.

Take, crumbs of bread, three ounces ; common water, half a bottle ; boil to a suitable consistence for a cataplasm.

For the bread may be substituted the flour of lintseed, powdered mallow leaves, white mallows, &c.

N. B.—Decoctions of lintseed, roots of white mallows, mallows, wheat bran, &c. mix better, with the water. We ought to use them, whenever we can. When we apply an emollient cataplasm, it ought to have an agreeable warmth ; its moisture ought to exude readily through the cloth. It should be renewed twice a day. It is excellent in inflammatory wounds.

No. 17.—Sulphur Lotion for the Itch.

Take, potash of sulphur, four ounces ; common water a quart and a half ; sulphuric acid, half an ounce : mix and keep in a bottle for use.

No. 18.—Itch Ointment

Take sublimated sulphur washed, two ounces : sea salt, one ounce ; lard, eight ounces. Mix the whole properly.

*No. 19.**

* This is for the class of diseases struck out, and therefore not inserted.

No. 20.—Chalybeate water.

Take, common water, one quart ; cool in it several times bars

of iron heated over white heat. We can further obtain chalybeate water, by allowing nails to remain for several days in water.

Articles for dressings, for a detachment of a hundred men.

Slings, or scarfs.....	three.
Body bandages,.....	four.
Skeins of thread,.....	two and a quarter pounds.
Large pieces of linen,	two and a quarter pounds.
Small pieces of linen,	one pound.
Tow,	one pound.
Strips of cloth,	ten yards.
Sponge,.....	one.
Agglutinative plaster of gum- med diachylon spread upon cloth,.....	eight ounces.
Cupping glass,.....	one.
Tartar emetic,.....	five packets, containing a grain each.

N. B.—We do not include splints in this list, because we can easily make them wherever we are.

After what I have said in this chapter, it is easily perceived that soldiers can, in a great variety of cases, mutually take the preliminary steps for recent wounds, and internal complaints when they first arise. But, to this end, it is indispensable that the precepts, contained in it, should be deeply engraven on their minds.

The best way to obtain this object will be to direct the staff surgeons to hold a medical lecture twice a week, and especially to thoroughly instruct the soldiers in the method of applying bandages, and dressing recent wounds: these are sufficiently frequent in regiments in consequence of duels and other accidents.

The regimental dispensary will furnish all the requisites for this course of study, without rendering it necessary to increase the sum allotted for the maintenance of this establishment.

CHAPTER XII.

POST FACE. (EPIGRAPH)

Many useful facts have necessarily been omitted in this pamphlet written hurriedly after sixteen years absence from practical example, and in my complete isolation from books, and even from all kinds of advice. Many others have been repeated, because there exists such an affinity in the facts, that certain circumstances, belonging in common to several, have naturally recurred to my pen, when these facts have presented themselves individually. So far as this goes, this repetition has done injury to no one but myself, if it be an injury : but I have already told you that I am very indifferent on this head, for I neither am, nor wish to be, an author ; I am not writing a book ; I have confined myself to collecting in a sketch a few thoughts, which peace has well nigh blotted out, and which I conceive to be useful.

On glancing over these pages, I see more plainly the imperfection of my work. It is a terrible ordeal to undergo, when one reads himself again in print ! The printed work is, as it were, the mirror which renders truth so much the more without disguise, so much the more inflexibly rigid, inasmuch as there are no means left of correcting the errors which are pointed out ; one must suffer accordingly, or break the &c.

I therefore march on without illusion, and rely on this brief post-face, as the rear guard which will pick up and collect a trifling portion of that which has been forgotten or lost : it will glean but poorly undoubtedly in this field so vast and so rich, but I cannot linger for it, and the little that it may bring to me will be well received, for it will assist in dovetailing that which is, by explaining that which might not be, sufficiently clearly comprehended.

The word *leader*, in my idea, does not express such and such a rank, but a particular duty. That, which I say of him, applies equally, in its generalities, to the serjeant as to the superior officer, from the moment that either one or the other is entrusted with a specific charge; I maintain that, whatever that position may be, the leader ought to be *example personified*, that he ought to support the *onus* with an undying constancy of vigilance and exertion; which will prevent this burden from weighing him down under it; for it will be more difficult to restore a machine once out of order than one which has to be made fresh to hand.

In the chapter upon "saddling and stowing the kit," I perceive that the copyist has omitted the page which concluded it. Here it is. "A commandant of a squadron ought to pay unremitting attention to the horses of his squadron. He has every motive to inspect them, and every instant ought to be employed in looking after them. The saddling ought especially to attract his constant attention, for it is the cause of horses being lost, and consequently of the want of success; let him then think of it.

"The dismounted trooper ought to remember that, if he be ordered to save his horse's equipments, it is not from a system of economy. The motive is greater and nobler; it is entirely his personal interest. In fact, if a spare horse be found in the rear, this trooper, furnished with his saddlery, can immediately resume his place in the ranks, and join under fire, where he will reap the reward of his good conduct and courage.

"We sometimes see, to the disgrace of regiments, troopers who gall their horses on purpose, in order to have an excuse for concealing their cowardice in the small dépôts; the means which they use are, folding their saddle cloth badly, or placing gravel within its folds. If we can detect a scoundrel of this kind in the act, he ought to be made a most severe example of.

"When we commence a campaign, the first care of an officer commanding a corps ought to be to have the curb bit and the snaffle tinned over; to grasp all those portions of leather, which had been previously waxed, and to continue to do this throughout the campaign. These two precautions will release the trooper

from an infinitude of details, which uselessly take up his time ; they prevent the horse from becoming disgusted with a rusty bit, relieve the kit of an absurd quantity of brushes, and preserve the saddlery.

" Let the officer commanding the corps assure himself with his own eyes that the hold-all of every man contains every thing necessary to repair his saddlery and clothing. Let him also assure himself that each squadron possesses a sufficient number of iron cooking pots, tin canteens, and grass knives, and that these articles are placed properly on the horses."

The trooper can never pay too much attention to his saddling and the arrangement of his kit ; and, in order to be sure that every thing is properly put on, he ought never to put his foot into the stirrup, without having gone all round his horse. • • •

I cannot place too great stress upon the adjustment of the saddles, the packing and loading of the kit, and the method of bridleing. Our horses are almost invariably saddled too far forward, which occasions a pressure upon the withers at least as serious as that caused by the iron bars of the saddle tree, which, in general, are not sufficiently raised nor enough in a boat shape. I shall be told that a saddle, kept back by the crupper will occasion sores in the tail ; but these sores are very rarely occasioned by pressure, but by slovenliness, by the dryness of the dock of the crupper, or the unevenness or insufficiency of its stuffing. The dock therefore ought to be thick, smooth, well fitting, often oiled, and the trooper, in adjusting it, ought to be particularly careful that no hairs of the tail are entangled in it. • •

The attention paid to the folding of the saddle cloth is of the first importance ; a saddle cloth folded carefully sixteen times, with the embroidery on the near side and above, and which does not pass more than one finger to the rear of the saddle tree bars, and from four to five in advance of the point of the iron bars, will never allow a properly fitting saddle to gall a horse, especially if the rider pass his hand frequently between it and the withers, in order to judge of the pressure, give it more freedom, and clear away the hairs of the mane.

The holster pipes are generally put on too diagonally. It is desirable that they should be placed more perpendicularly; this method would not allow of the pistols falling out at a rapid pace, and would enable the trooper to draw them from, and replace them in, the holsters with greater ease.

The cloak may be rolled up so as to be three feet long, instead of three feet six inches; and thus be completely covered by the housings; but its upper end ought not to be higher than the pommel of the saddle; and the buckles of the straps, which hold it, should be turned from before backwards (the tongue towards the breast plate) excepting the middle one, which will point the contrary way.

Cloaks are often exchanged, and the captains in command do not in general perceive this until after some time: there is a very simple method of preventing this, which is as follows: have the cloak marked upon the left of the division of the skirts, and in such a manner that the last figure shall be always at six inches from the holster pipe. Thus, when the cloak is rolled up, the figure will be always visible, either upon the holster pipes at the near side, or upon the man's right shoulder blade. The verification will be therefore easy and perpetual.

In order to pack well, we must first fix the nose bags separately, so as to be able, whilst *en route* and mounted, to get hold of the cloak, without disturbing the general stowage, in front.

The regulations direct that the bag, and buckram trowsers, should be fastened with the cloak. I apprehend that this method would be inconvenient on service, for it would complicate, and increase the weight of, the stowage in front, which we should always rather endeavor to lighten and simplify. It is therefore better to free the shoulders of the horse by putting the trowsers and bag upon the seat. By this method, we can even do away with the pad altogether.

The regulations further direct that a man's traps should be placed at length in the portmanteau; but, in campaigning, we must take everything into calculation, to avoid injury to the kidneys, and we shall attain this end, by rolling the things up at the ends

of the portmanteau. For this purpose, the trowsers will be rolled up in their length, and with the width of the legs, and placed at one end, the linen will be rolled up in a similar manner and placed at the other. This mode of packing, which will not be destitute of grace, since it will make the portmanteau assume an arched shape, will not rumple the clothes, and will avoid all injury to the kidneys. A hundred and fifty young mounted chasseurs of the 13th, with their kit packed thus, started from Auch, and arrived at Cadiz by forced marches, without having a single horse galled.

The saddle bags ought to be placed so as not to be visible from the rear. The straps, which fasten them, ought to be drawn tight, in order that the load may not slip under the cantel, or fall to the rear. The portmanteau ought to be perfectly straight, and the boots should be quite flat, so that their heels may not project forwards, which otherwise often happens.

The horses are in general badly bridled: this arises from several causes, which are not sufficiently noticed. The first is that the front is too short, which brings the mountings too close together, and prevents their being put sufficiently to the rear: the second is that the cheek billets do not fill up the eye of the check bits. The bit then plays, and it will be in vain for you to tighten the nose band unconscionably, for you will gain nothing by it, and put the horse to martyrdom.

I have told you that in the field you must grease those leather parts, which are waxed in garrison. If, after a campaign, you return to cantonments, remove the grease, and make use of the wax composition, for which the following is the receipt;

Three quarters of a pound of white wax.

A pint and a half of hatter's black.

A quarter of a pound of salt of tartar.

Take a varnished and new copper pan. Put in it a small quantity of hatter's black; in which you will thoroughly dissolve the salt of tartar: then add the wax, and, after it is properly melted, the rest of the hatter's black. When the whole is thoroughly melted and amalgamated, add lampblack, until it becomes of the

consistence of pomatum. This operation must be conducted over a charcoal fire, without boiling.

A good precaution, which an officer may take at the beginning of a campaign, is to carry along with him some pieces of water-proof cloth, which will answer either for covering his horses and his kit in abundant and continuous rain, or to spread under and over himself when bivouacking. Waxed cloth is too fragile, the water proof cloth sold in the shops is too heavy and too dear: let the officer then prepare it for himself. To do this, let him spread linen, or cotton, cloth, upon a frame, or a pannel, and let him rub it over, by means of a camel hair brush, with a preparation thus composed. Put into a glazed earthen pot two pounds of lintseed oil: add to it two pinches of arsenic, and about the size of a small lump of resin. Suspend in the oil, tightly tied up in cloth, eight ounces of pounded litharge, and so that this litharge do not touch the bottom of the pot. Boil the whole for six hours over a slow fire. Let it then cool, and spread it on the cloth. Let the cloth dry in the shade and stretch it upon the frame.

I have told you that a detachment, when marching, ought to make a long halt half-way every day. It is when thus halted that the report should be sent in.

In saying, in the chapter upon remounts that it is necessary that the horses should be strong limbed, I must not be understood to mean that they should be heavy, and like those which have been sent to a certain regiment that I could name, or to a certain remount dépôt that I could also name. Cart horses should not be admitted into our ranks; but often slim-limbs do not indicate speed, nor powerful ones, heaviness. It is the *tout ensemble* of the horse that should be considered; that is to say, the symmetry of his proportions. A large carcase cannot well be sustained by frail supporters, and a horse, with a short barrel, well ribbed up, a light head, rounded haunches, powerful hams, short legs from the knee downwards, and short pasterns, may, without danger, have legs as powerful as his build, without being less swift for all that: on the contrary, it is a qualification.

I have forgotten to say, in speaking of officers on detachment, that they should always carry off the maps of the country which they may find: very often we may find in the hotels of towns, in the houses of surveyors of plantations, of individuals employed in civil engineering, or under government; and, in country seats, we fall in with maps valuable for the correctness of their details. We should never neglect to enrich ourselves with them, and deprive the enemy of them.

The first precaution, on entering cantonments in the vicinity of the enemy, ought to be to point out the place of assembly, then to plant the advanced posts, and to relieve them sufficiently often to allow of their participating equally in the rest enjoyed by the remainder of the army.

In some chapters I have allowed myself to discuss the regulations: I have compared that which I have seen on the field of action with what they lay down, and I have endeavoured to unite practice with theory. It is allowable, I firmly believe, to establish the sacred arch, for conviction and I see no impiety in testing its strength, especially when the object aimed at is the attainment of useful verities.

In the chapter upon arms, for instance, if I have pointed out the sabre cuts which appear to me to be the most usual on service, I have not thereby wished to deny the utility of the precepts of Captain Müller; on the contrary, I accord full and entire justice to that officer, to whom the cavalry is greatly indebted, for he has perfected the wielding of an arm, to which, before his time, sufficient attention had not been paid in our army; he has developed its resources, and, if the generality of troopers could only make as good use of it as he, that theory would be applicable on service in its minutest details; but, unfortunately, this generality is not, even to the present moment, sufficiently active, nor such thorough troopers, as to be compared to the model, who, by his remarkable skill, stands out, and will long stand out, as a solitary exception; and, as the subject, which I proposed to myself, is the application on active service of *existing materials*, I have been obliged to lower the standard of qualifications, discuss facts, and

specify those which I have observed to be the most easy and useful on the battle field.

As to the rest, until you actually cross weapons, employ your time much in fencing according to Müller's instructions; using the weapon in his fashion, and learning how to employ it, especially in the circular parry, by developing and communicating activity and strength to the fore arm, would accelerate your instruction, just as the gamuts do that of an instrumental performer.

I have told you how the lancers ought to attack. I have not told you how you ought to attack them; but with an intelligent officer the information on the first head conveys that on the second; however, I will say a few words:

The charge of lancers ought to be compact, and their retreat in a dispersed manner. Carbineers, then, ought, in attacking lancers, act, as with cuirassiers; that is to say, form column, and break the centre. Once in the middle of them, let the carbineers, close in upon them; let them always endeavor to crowd them into small sections, let them roll them back in a mass incapable of inflicting injury as far as they can. Deliver the point! deliver the point! do nothing but deliver the point! The lancers, jammed together can neither point nor parry, and one of two things must take place: they will either throw down their lances, in order to get at their swords, in which case, you are upon equal terms; or else they will retain their lances, and in this second case you will have the best of the bargain. Our pivot files in the lancers of the imperial guard did not carry lances: I remember that upon two occasions in 1814 (at Hoogstraten near Breda, and at Pont-atrecin below Lisle) having to deal with Russian and Prussian lancers who, like ourselves, held their own upon narrow roads with deep ditches on either hand, I placed at the head of my column my intrepid carbineers whom I made my lancers follow; these last having put their lances in the bucket, and drawn their swords: having once entered the jammed mass of our enemies, our success so far surpassed our hopes that we cut them down without danger to ourselves.

In the chapter upon escorts, I have forgotten to say that, in an enemy's country, the commandant of a convoy ought to watch with the utmost strictness the peasants, who are driving his carts, especially at night; if a line of sentries does not exercise a sleepless vigilance over them, they will undoubtedly escape, carrying off their horses with them.

Every time that in a hostile country there exists between a detachment pushed far in advance and the inhabitants a species of moral compromise founded upon distrust, it is prudent to take hostages, and to keep them in the bivouac. This measure has an imposing effect upon the inhabitants, and deprives them of all desire to betray us, to deliver us to the enemy, or to deal unfairly with our men, when away from the detachment.

In the chapter upon Partisans, Victuals. I have pointed out that we can, and often should, levy contributions; those which are limited to the natural productions of the soil are the most lawful, especially when they are urgently required; those in money ought never to be imposed except by order of the highest authority; every officer instructed to levy and collect a contribution of this sort ought to require the order to be given to him *in writing*.

In Belgium and Flanders, at the end of the campaign of 1814, the cossacks, assisted by the inhabitants, notwithstanding the armistice signed by General Maison, continued their attacks upon us. The General sends a hundred lancers of the guard to put a stop to these proceedings, and to operate between Lisle, Furnes, Nicuport, and Dunkirk. The detachment sets out, with its standards covered, and housings rolled up. The insurgent inhabitants, not perceiving the eagles, and deceived by the red uniforms, meet him with cries of "Down with the French! long live the English! long live the Saxons!" The officer in command, fully appreciating his hazardous position, does not fall to blustering; he merely keeps his new friends at a distance, and allows no one to communicate with them except some Alsatian lancers, who are desired to represent themselves as in the English service. He thus obtains the fullest information, of which

he makes good use to direct his march and his military operations; then, levying contributions of every kind from friendship rejoicing to be of service to him, and giving receipts in the name of the principal staff officer of the Duke of Saxe Weimar, he one night, after a general attack, retreats to Dunkirk, with his booty and his prisoners. There he exchanges the products of his expedition, for red and blue cloth, and every thing which men require whose clothing is reduced to tatters by campaigning, and clothes and equips his detachment afresh.

I repeat and maintain that just as the education of colleges and families is quite a different thing from that of the world, and the one contradicts the other, in the same way also the education of the garrison, such as is given at the present day, will have the lie given to it in numberless instances by active service: this education appears to me to be altogether insufficient for the light trooper; and I yet require to have it explained to me how it is that the same theory is put into the hands of the cuirassier and the hussar, when in the field their duties are so completely distinct from, and opposed to each other.

You have sometimes, when marching, met a column of cuirassiers; like myself, you have from the backs of your small horses, measured the height of those giants, and internally drawn a disheartening comparison between your own strength, and that of those iron clad colossal figures, so powerfully armed. Nevertheless, a hundred times on service you will be opposed to similar troops. Ye men, so strongly wedded to a theory, would you then manœuvre as they do? In a charge, would you oppose line to line, and would you, by putting man to man, and breast to breast, ensure your being overthrown and ground to atoms, without a hope of success or even of vengeance? If you stick to the rules of theory, you will infallibly be vanquished; if you seek for resources independent of them, you will conquer. Oppose craft in proportion as you are wanting in strength. You are lighter and more active than your adversaries, turn them, harass them, demoralize them by surprises, overwhelm them with fatigue; bring them upon the field of skill; skill is more powerful than brute

force ; the diminutive tiger is the only animal which conquers the elephant !

General Morand, in his considerations upon cavalry, says, "whilst the Tartars, brave and skilful, mounted upon active horses, temperate, and rapid on their movements, ravaged Asia and spread terror through the north of Europe, other troopers wielded the battle axe and the war club, and shivered harmless lances on their breasts. These troopers are mounted on enormous horses, covered like themselves, with plates of iron ; they appeared like moving towers : the ground of the Gauls, of Germany, Italy, and the mountains of the Asturias tremble under their tread. Their bodies, enclosed in heavy and cumbrous cases, are poised upon the saddle ; the thighs and legs hang down, weighed down by their iron load ; the slightest shock would unseat them, as occurs to every body merely in equilibrium. Their offensive arms are analogous to the resistance which they have to overcome. Such were the troopers of the middle ages. They were powerless before the Arabs and the Tartars ; they were so in the plains of Antioch, in Palestine, in Egypt, at Nicopolis, and especially in Hungary. What a miserable spectacle was that of these troopers cased in iron, and concealed in the defiles which must be crossed in order to reach Vienna from Bavaria, trembling before the Turkish army, which, spread around the walls of that capital in the vast plain, quietly pursued the siege thereof ! It was all up with these troopers, their armour was on the point of becoming trophies, and their unsculptured carcasses the prey of wild beasts, when, all of a sudden, some thousand warriors, clad in garments made of deer and sheep skins, their shoulders glittering with clanging wings, their lances ornamented with a brilliant cloth pennant, their horses light, swift, and hardy, pour out from the forests of Bohemia, cross the Danube, and appear at noon of a fine day amidst those frightened troopers that all Christian Europe had sent to the assistance of Vienna. A glance was sufficient for Sobieski to reconnoitre the Turkish army, and to decide him to attack it : "forward," he shouts ; those magic words thrill through the breasts of his heroes, and the Poles dash forward at his heels. In one hour, the camp of the Turks presents nothing but heaps of slain, prisoners, and an immense

booty ; the Emperor of Germany can quit his bomb proof ; his clothing is of gold, and his glance full of pride. A young Pole dismounts to prostrate himself before him : " No humbling thyself, Palatine," says the hero to him, then passing through the crowd of loutish warriors, whom he has re-assured, he resumes his journey to his dominions, satisfied with his glory, and joyful to relate to his wife, a born French woman, and whose heart is as full of heroism as his own, his battle and his victory, a victory which ingratitude at a later period rendered so fatal to his country.

" If, as is the doctrine of the schools, the consequence of a possible act be good ; if the result of experience be a necessity ; if the same causes produce the same effects ; if the past lay the future bare to us, we cannot dispute that the best cavalry is that which alone has gained great victories.

" The hussars and the lancers, organized in imitation of people on horseback, would then be a better cavalry than the cuirassiers, who represent the troopers of the middle ages, and be sufficient to assimilate them more to their model in order to increase their superiority. It would be requisite, in my opinion, to develop their powers and skill still further by gymnastic exercises ; to shorten their stirrup leathers, to enable them to rise in their saddles, to use their weapons with greater effect, and throw the body forward so as to reach the foe ; to simplify the saddle, whilst it retains the advantage of a firm seat, by making it answer without the moveable saddle cloth, on which it is placed, and which by its continual shifting, causes galls to the horses, and falls to the trooper ; but especially would it be necessary to give them, not horses purchased from the pastures of Germany, but those which have been reared in the driest and most broken ground in France, which are accustomed to sorry food, and to gallop over rugged and difficult ground. *Frederic II. has said that a trooper ought to be able to follow a foot soldier every where, and that a foot soldier ought to be able to keep up with a deer.*"

To contend successfully, it is necessary not only to know one's self, but to know the opponent equally well. The strength of the

enemy is not a mathematical fact, which can be ascertained simply by the number of his men ; courage, instruction, the being habituated to warfare, difference of tactics, and a hundred other conditions, throw their weight into the scale ; then why will your peaceful professors content themselves with falsely adjusting the balance agreeably to the numerical strength ? Why will they not convey any idea of the circumstances, the differences, the particular facts, which exert so powerful an influence, which so repeatedly set at defiance every calculation, overthrow to the very foundation the bases styled rational, and why would they throw you, thus ignorant of these very important facts, upon the battle field, where, for a long period, you would be the victims of surprise, before you had learned to understand your enemy, and discovered the best methods of repulsing and attacking him ? The Kirguise* (Tartar), Kalmuck,† Cossack, Russian, English, Prussian, Austrian, cavalry, —are these armed alike, and do they manœuvre in the same manner ?

Whilst fighting by the side of Abdallah, Mirza, Solyman, and several other valiant Mamelukes, I have been better able to appreciate the military equitation of the Asiatics ; in the Brazils, I have formed my opinion of the troopers of the southern hemisphere :‡ in the battle fields of the empire, I have encountered all the cavalries of Europe, without exception, from that of the English down to the Kirguise ; I have seen them manœuvring with effect, and I am convinced that not one of them resembles another, that each has very marked distinctions, and that each must be met in a completely different manner.

It is in the nature of man not to go beyond what his actual necessities require, and consequently to subject his individual and collective actions to the commands of his necessities.

Before 1815, armies were employed in fighting ; since 1815, they have only served for purposes of parade ; we no longer require men

* Those hordes which fly in broad daylight before troops, and only reckon upon taking their revenge in the deepest darkness. (Author.)

† They are armed with bows and arrows. (Author.)

‡ Their sole arms are a lasso and a knife. (Author.)

of war, but men of similar height, scrupulously uniform in their seat and in their manœuvring, and we have completely filled in the programme proposed by this necessity. The military art, in changing its object, has altered even the actions and the language ; its movements have been divided, and regulated by line and compass, and its language reduced to arithmetical formulæ : your regiments of peace are doubtless fine statues, but they require to be animated They want motion, blood, spirit, fire, life, and war alone will teach you the value of these.

I shall be told, perhaps, that, under the empire, theory was just as incomplete as at the present day, and contained none of those instructions, which I consider indispensable. This is true ; but at that period all was action, theory, properly so called, did not form a hundredth part of our instruction ; dangers and daily experience made up the other ninety-nine parts.

War will render you another very important service ; that of recalling from exile *the brotherly feeling*, which the Restoration deemed that it had banished for ever, and to which the Revolution of July has but granted an amnesty, without being able as yet to restore it to all its rights. *The fraternity of arms* is a passion so powerful, so pure, so elevated ! True soldiers owe to it so much assistance, so much rejoicing, so much inspiration, so much glory, that its worship, once re-established, will make you complete, and will wipe away all painful recollections.

I appeal to you, my noble brethren in arms, Lawoestyne, Duchand, Bro, Thierion, Jacqueminot, and to several others, to you who listen to me, Friand, Moncey, Letellier, all so valiant upon the battle field, so firm, so attached in adversity ! It was not the conscription which decided our course of life, but this powerful, invincible, summons of a glowing ambition ! Our object then was not a retired staff appointment gained by thirty years active service, nor the charity of the Invalid establishment—it was glory ! it was vast, was this object—vast as the stirring times in which our youth was passed, and this ambition was allowable in a career, so hazardous, in which every-day death and glory tremble dequally in the balance ! In those glorious days, how much of joy and

assistance have we not owed to our mutual affection' and when, the victims of treachery, we laid down our arms under the bayonets of the English, and the poignards of the south, to leave them for beardless youths, who had not then the strength to raise them, and who have since grown up; in these sorrowful days, during these fifteen years of mourning, what consolation have we not derived from this same affection, born on the battle field, and sanctified by the same dangers, and the same devotion !

I have quoted the Cossacks to you, and presented them to you as perfect models: I will impress again what I have said to you on this head.

Some officers, who have not seen service, or whose duties have been other than those of advance posts, affect to treat them with contempt; yield no credence to them. Injustice towards an enemy is always an injurious and false policy; and the best way of creating resources for action is to be found, not in insult, but in observation. Enquire the opinion entertained of the Cossacks by our most illustrious soldiers, Marshals Soult, Gerard, Clause, Maison; Generals Morand, Lallemand, Pajol, Colbert, Corbineau, Lamarque, Préval; our intrepid leaders, Generals D'Aumesnil, Farine, &c.; all real officers in fact; they will tell you that light horsemen, who, like the Cossacks, surround an army with an impenetrable net work of vigilance and defence, who harass the enemy, who almost invariably deliver their thrust, and receive none, fulfil completely and entirely the object which all light cavalry ought to propose for itself.

You will read in the memoirs of Monsieur de La Valette as follows: "The Cossacks were an arm which rendered the war highly dangerous, especially to those officers entrusted with making reconnoissances. Many among them, and especially the general staff, selected by the major general, preferred forwarding the reports which they received from the peasantry, to going to a distance and exposing themselves to the attacks of the Cossacks. The emperor could then no longer know the true state of affairs."

Thus behold even French officers not daring to expose themselves! Behold the genius of the Emperor paralysed by the activity of the Cossacks! Is this fact not of some weight?

General Morand, again, tells us, in speaking of them. " But these horsemen are ignorant of these divisions, of these regular alignments, this order, in fine, so overweeningly estimated ; their custom is to keep their horse squeezed between their knees ; their feet rest upon broad stirrups, which serve to support them when they use their arms, so that they can throw their bodies forwards when they wish to deliver a thrust, or backwards when they seek to avoid that of their adversary. Trained to spring from a state of rest to the full gallop, and at that gallop to halt dead, their horses second their skill, and seem only to be a part of themselves ; these men are continually on the alert, move with extraordinary rapidity, have few wants, and thoughts of war are those alone which fill their minds.

" Such are the men who have swept the world with such terrific deluges, and who will, perhaps, ere long, change the destinies of several nations, &c. &c."

And further on : " The march of the grand French army, retarded by the Cossacks, and subsequently these Cossacks cutting it off from every resource, and falling furiously upon its flanks like enraged bees which torment and exhaust a lion roaring from the infliction of innumerable stings."

And again further on " What a magnificent spectacle was that of this European cavalry flashing in gold and steel under the rays of a June sun, extending its lines upon the flanks of the hills of the Méipen, and burning with eagerness and courage !

" What bitter recollections are those of the ineffectual manœuvres which exhausted it against the Cossacks, till they so despised, and which did more to save Russia than the armies of that empire. Every day they were to be seen on the horizon, extended over an immense line, whilst their daring flankers came and braved us even in our ranks : we formed, and marched against this line, which, the moment we reached it, vanished, and the horizon no longer showed any thing but birch trees and pines ; but, an hour afterwards whilst our horses were eating, the attack was resumed, and a black line again presented itself ; the same manœuvres were resumed, which were followed by the same result. It was thus that

the finest and bravest cavalry exhausted and wasted itself against men whom it deemed unworthy of its valor, and who, nevertheless, sufficed to save the empire of which they are the real support and sole deliverers. To put the climax to our affliction, it must be added that our cavalry was more numerous than the Cossacks; that it was supported by an artillery, the lightest, the bravest, the most redoubtable, which ever was mowed down by death; it must further be stated that its commandant, the admired of heroes, took the precaution of having himself supported in every manœuvre by the most intrepid infantry; and, nevertheless, the Cossacks returned, covered with spoils and glory to the fertile banks of the Danaetz, whilst the soil of Russia was strown with the carcases and arms of our warriors, so bold, so unflinching, so devoted to the glory of our country; such is the power of the organization, such is the secret of the conquest of Genghis, &c. &c.

After reading this passage, beautiful for its eloquence, historically true, heart-rending for its truthfulness, can we refuse to acknowledge them as models? and have we not a right to expect that our light cavalry drill shall be revised in its principles, corrected, and perfected in its details? Let the government, rejecting the traditions of fifteen years of slumber and of the Bas-empire, and assimilating the wants of that cavalry to those of the arms of each description, also send selected officers of our body to ascertain from nations devoted to horsemanship, all the improvements which we can appropriate to ourselves; and let these officers, reporting the result of this conscientious, diligent, and inestimable investigation, publish it to the regiments, which will not only improve themselves in their essential details, but will perfect themselves thereby for the attack, and learn how to defend themselves.

Occasionally, officers, and non-commissioned officers, think to impress their superiors with a high opinion of their zeal, and mode of conducting their duties, by selecting the moment of their being by to reprimand their subordinates, and shouting out to them. This is a detestable practice, and imposes on no one. It produces the exactly opposite effect to what they expect from it. The officers and non-commissioned officers, who carry on their duties best,

are those who find fault and halloo 'but the least, and do most work. Injustice, epithets, abuse of punishments, confuse a man, disgust him, and, if I may venture to say so, lower the estimation of the punishment, by stripping it of its moral power, and leaving nothing to it but its actual petty annoyances. Before punishing an inferior, especially if he be a young hand, he ought to receive repeated ~~and~~ mild warnings, then, if he turn a deaf ear to these parental admonitions he should be very severely punished ; for then you will be sure that it is not ignorance that you are punishing, but a depraved will, which should not be allowed to exist.

By an abuse of punishment, a regiment becomes hardened so as to deprive it of all generous feelings, and cause it to sink from its moral elevation ; it never regains it.

General Colbert, commanding the 7th hussars on service, warned the officers that whichever of them deserved to be put three times in arrest, should be sent back to the dépôt; in the course of three years, not a single one of them subjected himself to this severe punishment.

The first of our faculties is attention ; we can bring every other one to bear upon this, and can excite it in the dullest intellects, by teaching nothing beyond their comprehension. Military instruction is easy, when the teachers are patient, and when they bring down their mode of teaching within the reach of different understandings.

There are officers, who have seen nothing, (for seeing in peace is seeing nothing) and who give to themselves a weather beaten appearance, to be, as they fancy, light cavalry officers, and to make themselves, as they say, so many Lassalles. Let them cease to give themselves this useless trouble. Lassalles are not made, they are born. The copies of this noble, exalted, original, only make themselves disgracefully ridiculous. Those, who have made a pencil sketch of a Lassalle of the tavern, have either never seen him, or have never raised their eyes high enough to see his head ! Let them learn that General Lassalle, to the military talents, to the brilliant courage, which have justly placed him at the head of all the light cavalry generals of the empire, united the most ele-

vated, generous, mind, the most perfect, most distinguished manners, the most ready, and most varied, knowledge; and that nature, in taking pride in perfecting, and completing, this unique model, had so lavishly endowed him with the triple moral, intellectual, and physical powers, that Lassalle expended upon his pleasures nothing but the super-abundance, the excess, of those powers, and that the stamp of good taste and of distinction was impressed upon every one of his actions, whatever they might be. The *soi-disans* Lassalles of peace are only pitiful Falstaffs, who inspire nothing but pity and contempt.

That which I have said touching coffee houses in regard to officers, I apply equally to non-commissioned officers. If it be no longer allowable for the silver lace* to enter into a tavern, and sit check by jowl with a corporal, it is equally forbidden them to make a coffee house their constant resort, to contract bad debts there, and there to waste that time which is so valuable for their instruction. Non-commissioned officers ought to remember that they are *all but* officers, that they form a corps within a corps, and that they have a double honor of the corps to maintain.

They ought to watch over each other, not to carry tales of each other, a practice to be scouted by honorable men, but to warn each other as members of the same family, to give friendly advice, to rebuke each other, to guard against trifling errors degenerating into vices, and growing public, which would lower the reputation of the squadron, and of the regiment, and to preserve intact and unsullied the honor of their corps. If one of their comrades be deaf to this fraternal admonition, and they deem that there is no further remedy, they ought not to hesitate *unanimously* to request of their superiors his expulsion from their ranks.

Remember non-commissioned officers, that you are now the nursery of the army, and that you never had so fair a chance! whatever circumstances may arise, be not cast down. You will doubtless see, as we have seen, if you have been actively employed, or go on service, boys, who were yet even in the army, at the time when you were doing the state good service, and had attain-

* A cant term for non-commissioned officers. (Trans.)

ed the rank you hold, grow up in peaceful colleges,* and become your superiors, whilst you, who have been under fire, remain un-promoted; do not let this surprise you; this has ever been the case in times past, and doubtless will still continue to be so; but these protégés of favoritism, having attained the apogée of their sickly merit, will stand fast by the force of circumstances; you will then go forward, in your turn, to the full standard of your acquirements, and of your real rights, which no one will deny, and you will take the proper place which you will feel a pride in; the previous annoyances will fade away in your memory, or, if the thought of them occasionally return to your mind, it will only be to remember that it is to them probably that you owe the exertions which you have made, and which have so brilliantly justified your success. If lazy seniority step in to deprive you of that rank which you conceive to be due to your usefulness and activity, still do not be surprised, obey without murmuring; speedily you will have your revenge. That which you require, is to fix the object, and to establish your incontestable right to attain it; for this, labor, labor, labor. Do not confine your instruction to the narrow limits of the square of your written duties: enlarge them by study, by that ardent study which throws; so to speak, our whole soul into the searching into those objects, the knowledge of which we wish to attain; your superiors will take notice of this indomitable feeling, which will soon become a passion in you, and which will not only rapidly hurry on your promotion, but give a useful and noble direction to your whole course of life. At present the point of departure is the same for every body, and the reaching the goal rests with yourself. I do not know where I have read; "Abou-temir had no ancestry; he conquered Egypt. Some one ventured to ask him from what race he sprung. "Behold my race!" he replied, pointing to his army, "and my genealogy"! "showing his sword."

As to you, officers, once in the field, let every thing form matter of observation and study for you. Make yourselves masters

* I do not here intend to allude to the pupils of the military schools, whose particular education, and the labors, which it imposes upon them, already constitute a real right. (Author.)

of every movement of masses, and details, which passes under your eyes, even when you are taking no active part therein; endeavor to guess the intention which rules them; fathom that intention; even anticipate it in its successive developments; it is thus that you will learn the art of war, and that you will fix in your enriched memory a crowd of practical and comparative examples, for which you will find useful employment, when, (left to your own resources), the same necessities may suddenly arise; that, which you cannot comprehend, get men more advanced to explain to you; and lastly allow nothing to remain indefinite or undecided in your mind.

I have said that young officers ought to consult, and religiously listen to, the old ones. I repeat it: these, warned by their wounds, and their years, are leaving us; to-morrow they will all have quitted our ranks; so much the worse for the army in the field. These old warriors have but little book learning, I grant; but war is not altogether in books. The field of battle and the bivouac have also their science, and you may turn over all the libraries in the world without acquiring it. Consult then those, who possess it, and respect those masters who have so painfully obtained it. You are not sufficiently gentlemen to know every thing without having learned any thing, and if, under fire, you are fortunate enough to serve under these old practical professors, you will appreciate what they value, and you will ascertain that the scraps of it are valuable.

I have quoted some facts, because example is practical, incontestable, precept, and because, as it may occur again on the ground, they will have imparted to you before hand that which is requisite to enable you to receive it without surprise. I have, however, been chary of my quotations, which crowded on my memory, as I wrote, but I must yield to the necessity, of giving you one more example of ambuscade.

The Emperor was marching in hot haste to avenge in the plains of Tæplitz, the defeat of Vandamme. Our columns, pouring down from Calu, were advancing, when the enemy, wishing to repeat the successful mode of attack, which he had made on us some days

before, outflanked our left, and, in front of a formidable infantry, planted a battery of twenty guns. A hundred lancers of the guard threw themselves into a ravine, whose windings brought them close up to it under cover, then dashing boldly forward under a storm of grape and musquetry, and in a hand to hand fight with the hussars of Kinmayr, and Hesse Homberg, they carried the battery, and retired slowly, without leaving a single man prisoner in the hands of the enemy.

In quoting General Curély, I have personified the combination of every military quality : if I had known a more perfect model, I would have offered it you in his stead, nevertheless, I have been happy and proud, I confess, in finding the distinction of his example in the recollections of my devoted friendship, and in strewing a few flowers, humble and faded doubtless, over the most simple and precious grave, ungratefully forgotten by his country.

Curély has left his children nothing but his name. It is a heavy one to sustain, but it is a fortune in itself. Let but his noble boys, at present Non-commissioned officers in the army, if they require support or protection, but pronounce this name. Every where an old hussar, or an ancient chasseur, of our grand army, a true soldier in short, will hear it; a deep sigh, a dropping tear, will greet it, and the child, or the youth, will find a protector, a second father.

This description of manual treats of *the employment of light cavalry, such as it exists at present, and with our actual resources, in the presence of an enemy.* If we had peace and leisure, I would treat of cavalry as I understand it. I would conscientiously draw out for this work whatever has passed under my observation, and the end of all my ambition will be attained, if my remarks are of any use to an arm not generally understood, I believe, at the present day, and to which I have devoted, my life.

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LIST OF ERRATA.

- Page 18, last line but one, *delete* "should."
,, 19, last line but one, *for* "occasions" *read* "occasion."
,, 137, note, *for* "waste," *read* "wash."
,, 389, line 15, after "Genghis" insert inverted commas.
,, 269, 4th line of note *for* "page 273" *read* "page 272."
,, 291, *for* "Chapter XXXV." *read* "Chapter XXXVI."
,, 294, *for* "Chapter XXXVI." *read* "Chapter XXXVII."
,, 297, *for* "Chapter XXXVII." *read* "Chapter XXXVIII."
,, 330, *for* "Chapter XLI. *read* "Chapter XL."

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